

FIG. 38
IMAGE DETECTION INTERFACE

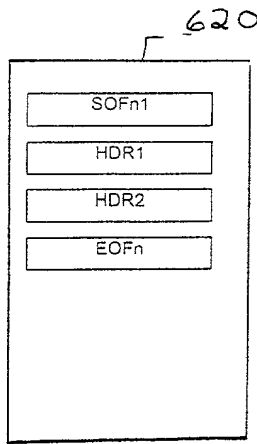


FIG. ~~38~~
39

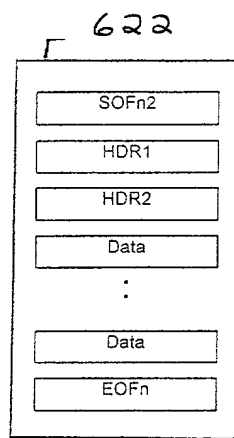


FIG. ~~39~~
40

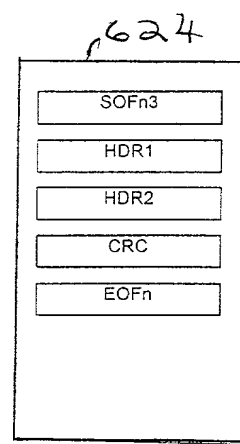


FIG. ~~40~~
41

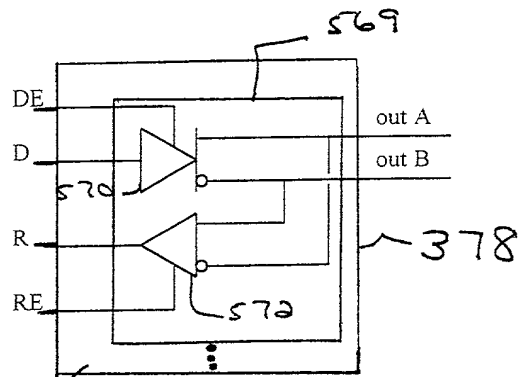


FIG. ~~41~~ ~~42~~ 42

REAL TIME
BUS INTERFACE

FIG. 41

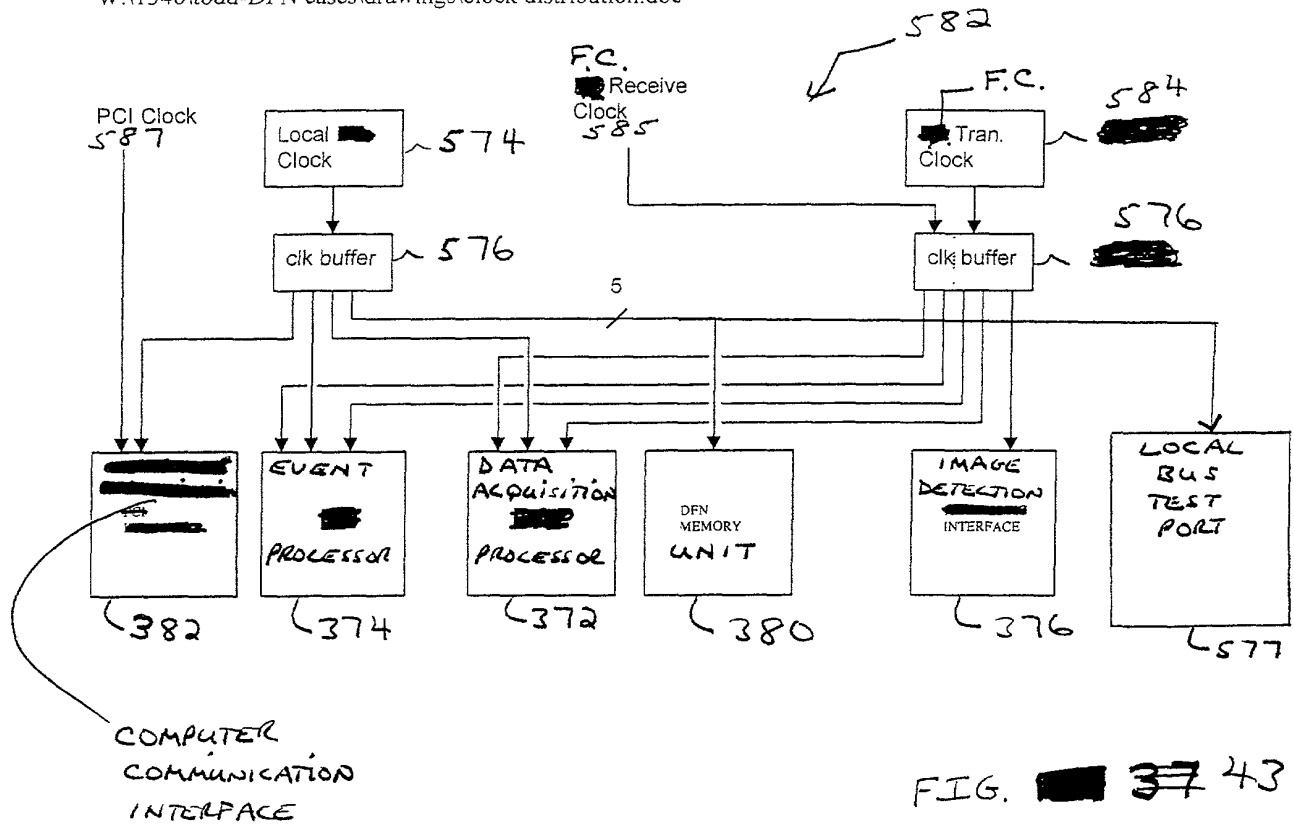


FIG. 37 43

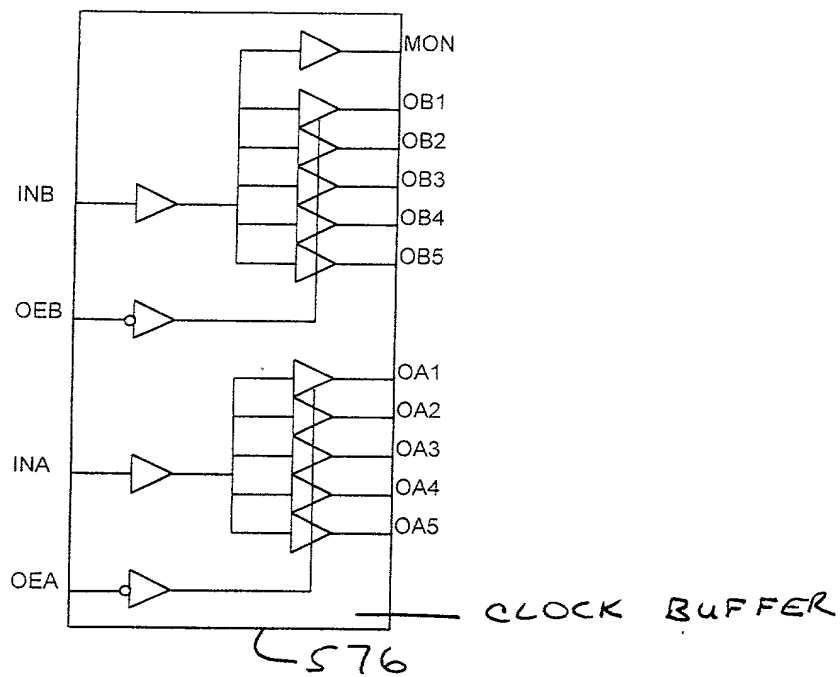


FIG. ~~44~~ 44

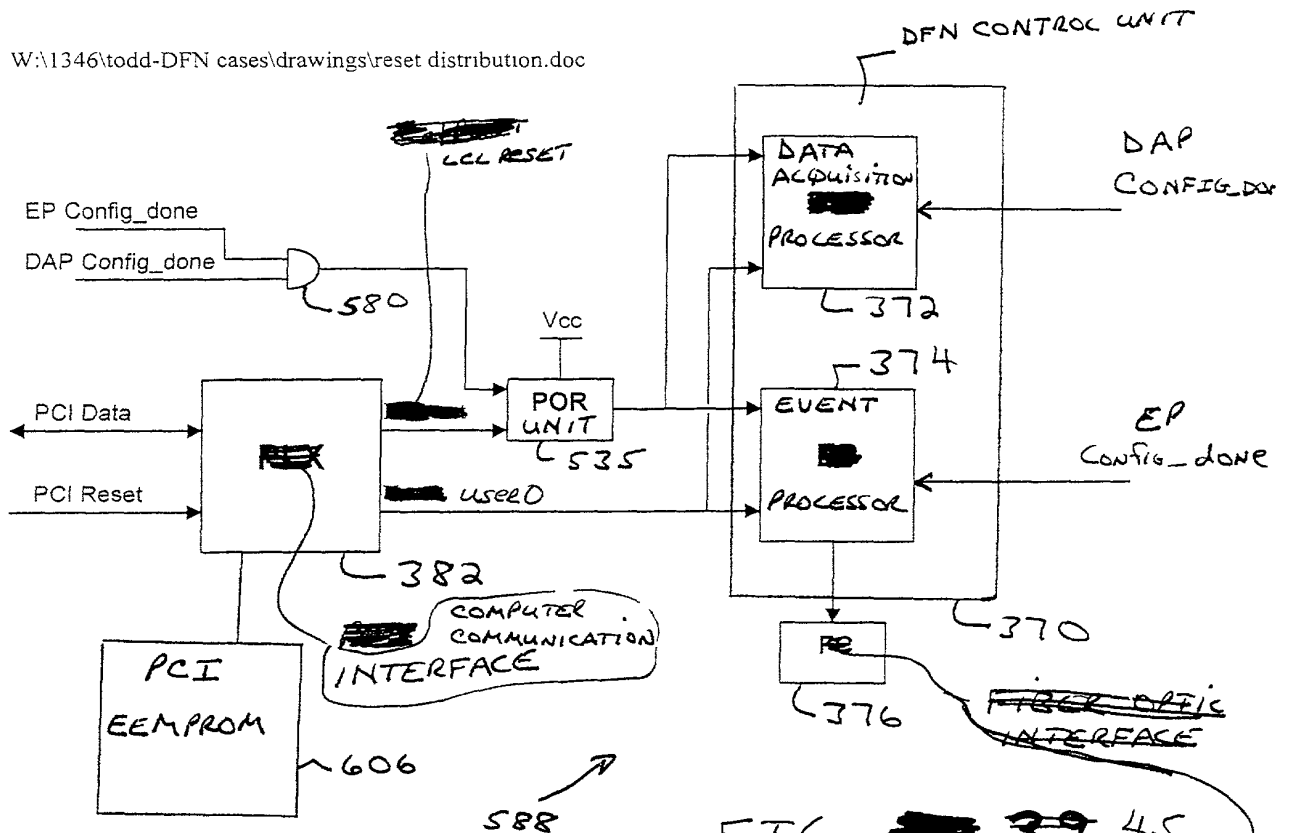
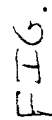
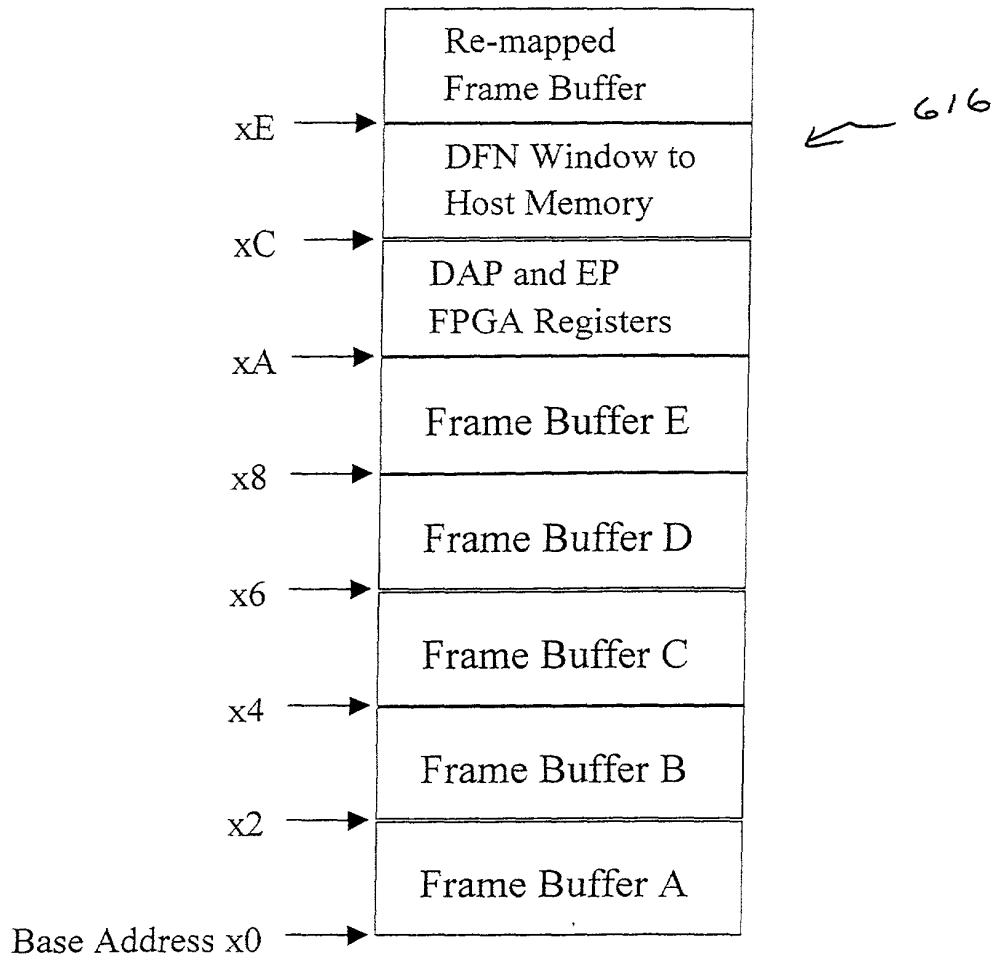


FIG. ~~39~~ 45

IMAGE DETECTION INTERFACE

~~COMPUTER COMMUNICATION INTERFACE~~





Mapping of 16 MByte PCI Address Space

FIG. ~~47~~ 47

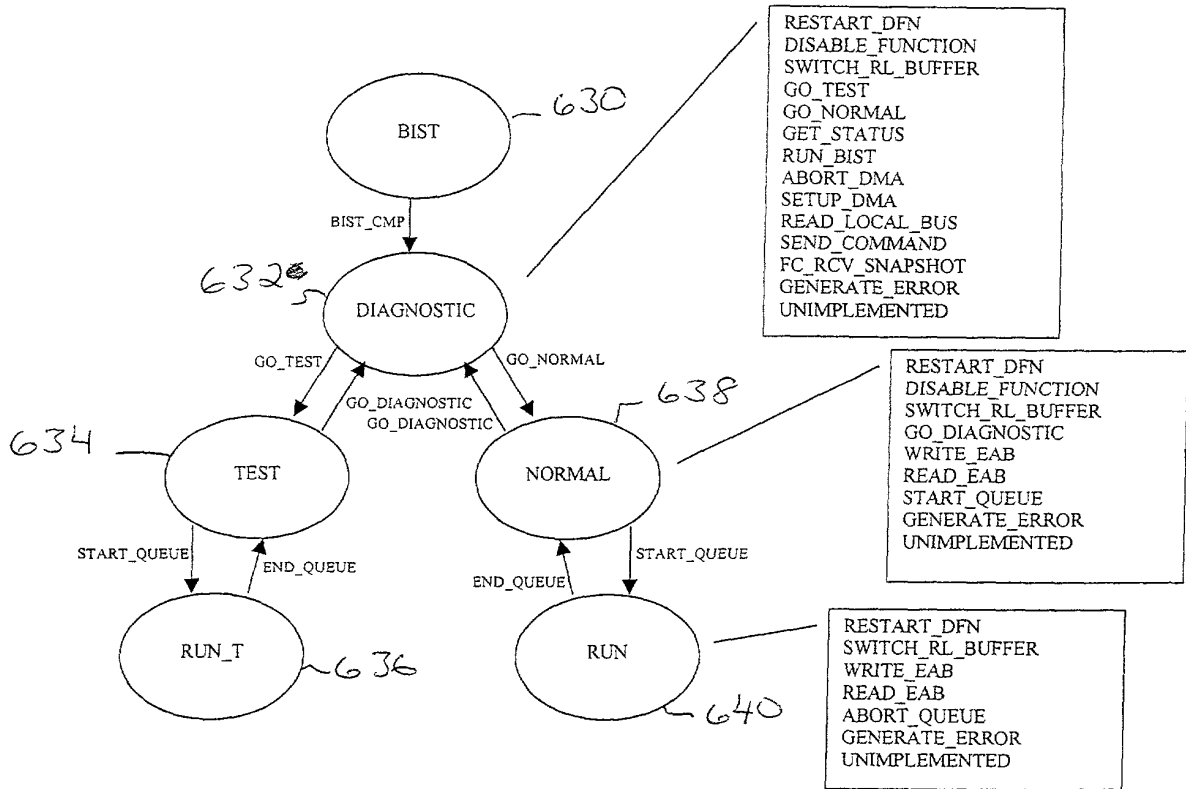


FIG. 48

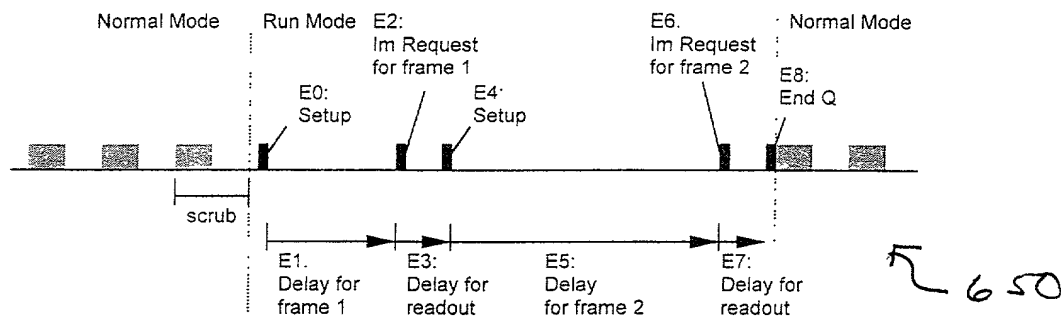


FIG. 49

Event Mnemonic	Event (showing size of arguments)	Op Code (hex)	Data (bytes)	Total (bytes)
Endq	Endq	14	0	1
Delay (T)	Delay (0xff ff ff ff)	10	4	5
Send (command, value)	Send (0xff ff ff ff, 0xff ff ff ff)	04	8	9
LoopKN (K, N)	LoopKN (0xff ff, 0xff)	0C	3	4
LoopKF (K, F)	LoopKF (0xff ff, 0xff ff ff)	0D	5	6
Wait (F)	Wait (0xff ff ff)	09	3	4
Flag (F)	Flag (0xff ff ff)	08	3	4

FIG. 50

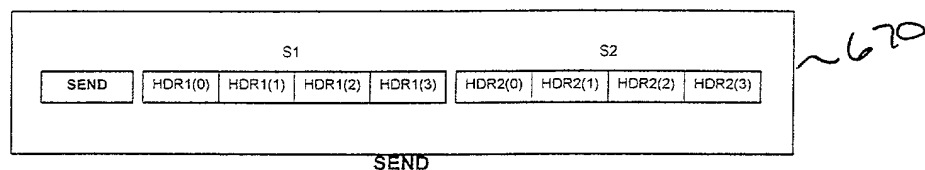


FIG. 51

Error Mnemonic	Description of Error
FC_TIMEOUT	Timeout expired with no ACK detected
FC_BAD_ACK	ACK did not match transmitted command
FC_EXTRA_ACK	Unexpected ACK received
FC_EXTRA_CMD	New Send event while waiting for ACK from previous Send
SIG_DET	No input signal power on Fibre Channel (cable disconnected?)
RXERROR	Fibre Channel receiver detected bad data (defective chipset?)
WRDSYNCN	Fibre Channel Data link unsynchronized
CRXS(1)	Bad Received CRC detected (Fiber-optic cable problem?)
CRXS(3) and CRXS(2)	Bad order in link state machine (defective chipset?)

← 672

FIG. 52

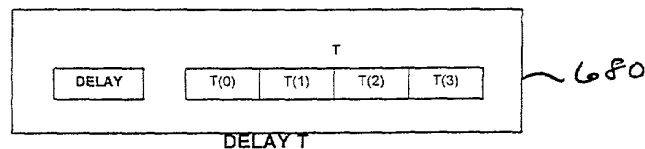


FIG. 53

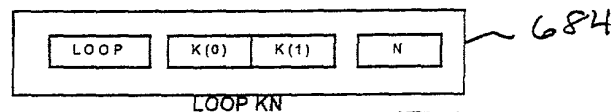


FIG. 54

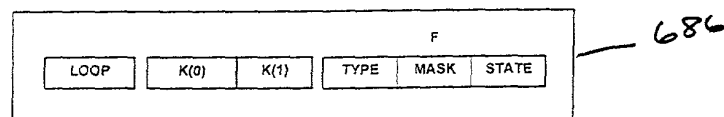


FIG. 55

FIG. 55

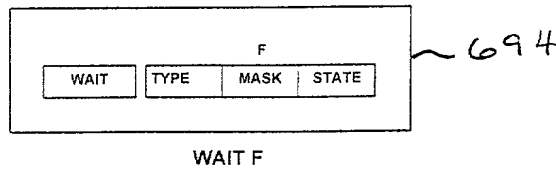


FIG. 56

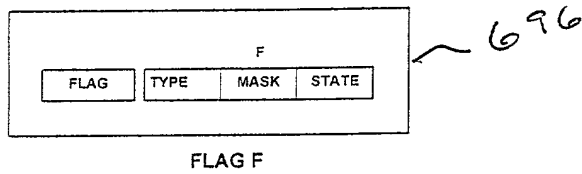


FIG. 57



FIG. 58

698

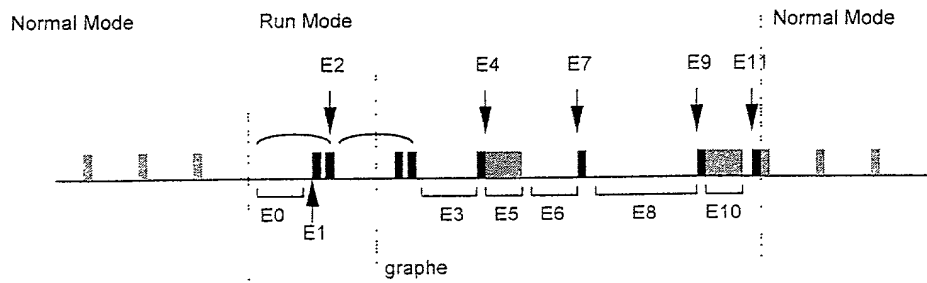


FIG. 59

E11	EndQ
E10	Delay 125 ms
E9	Send Im Request
E8	Delay 500 ms
E7	Flag RT2
E6	Delay 50 ms
E5	Delay 125 ms
E4	Send Im Request
E3	Delay 300 ms
E2	Loop 2, RT1
E1	Send Scrub
E0	Delay 300 ms

Event Queue

FIG. ~~60~~ ~~61~~ 60

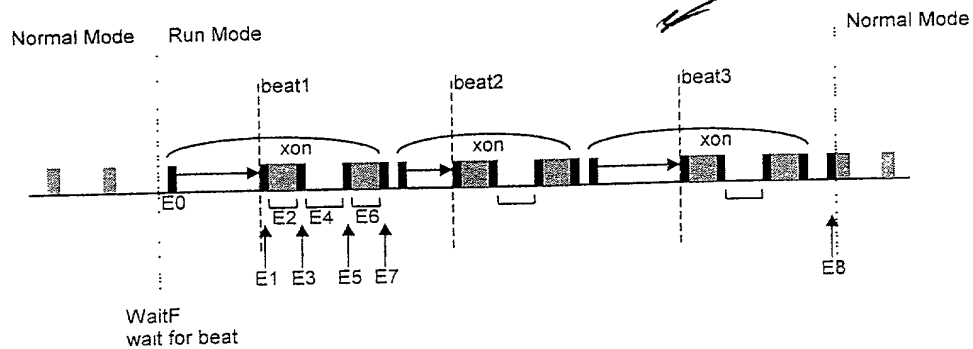
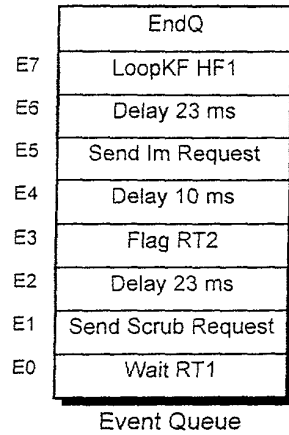


FIG. ~~60~~ ~~61~~ 61



← 704

FIG. 62

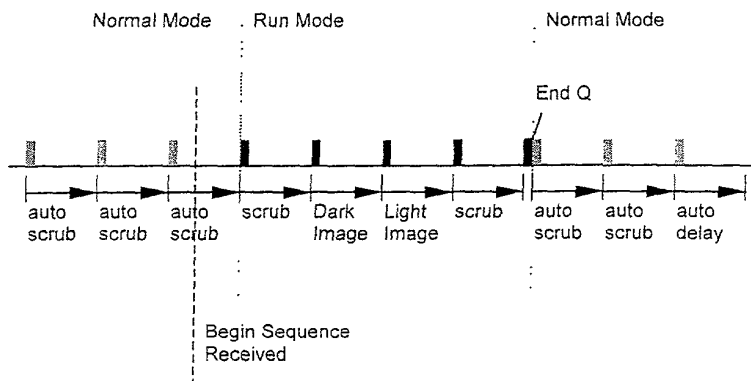


FIG. 63

```
sequence_begin ();

# define qv defaults:
%qv1 = ('delay_qv' => 5000);

# call frame with qv's
frame_type1 (NULL, \%qv1, 1);

sequence_end ();
```

FIG. 64

```
sub frame
{
    $QVf = 'frame';

    %qv = ('delay_qv' => [10000]);
    %qp = ();

    compile_init(@_, \%qp, \%qv, $QVf);

    Delay('delay_qv');

    compile_finit();
}
```

FIG. 65

```
pDFN->DFNChangeQueueVariable
(
    (char *)SymName,      // variable name
    (char *)sndBuf,       // new value
    BufSize,              // num bytes to write
    (ULONG *)&debug      // developer info
);
```

FIG. 66

User Application

```
// load and run the event sequence
pDFN->DFNBeginSequenceNoMappingNoLog
(snum, "d:\\HF.bin");

//assign data to be passed
sndBuf = 25000;

// change the queue variable
pDFN->DFNChangeQueueVariable
(
    (char *)SymName,      // variable name
    (char *)sndBuf,       // new value
    (ULONG)sizeof sndBuf, // num bytes to write
    (ULONG *)&debug      // developer info
);
```

FIG. 67

Perl Script

```
sub frame_type1
{
    $HFfrm = 'frame_type1';

    %qv = ('delay_qv' => [20000] );
    %qp = ();

    $image_cmd = [0x800000, 0x0];

    compile_init(@_, \%qp, \%qv, $HFfrm);

    Send($image_cmd);
    Delay('delay_qv');
    LoopKF(2, 0xAAFF01);

    compile_finit();
}
```

FIG. 68

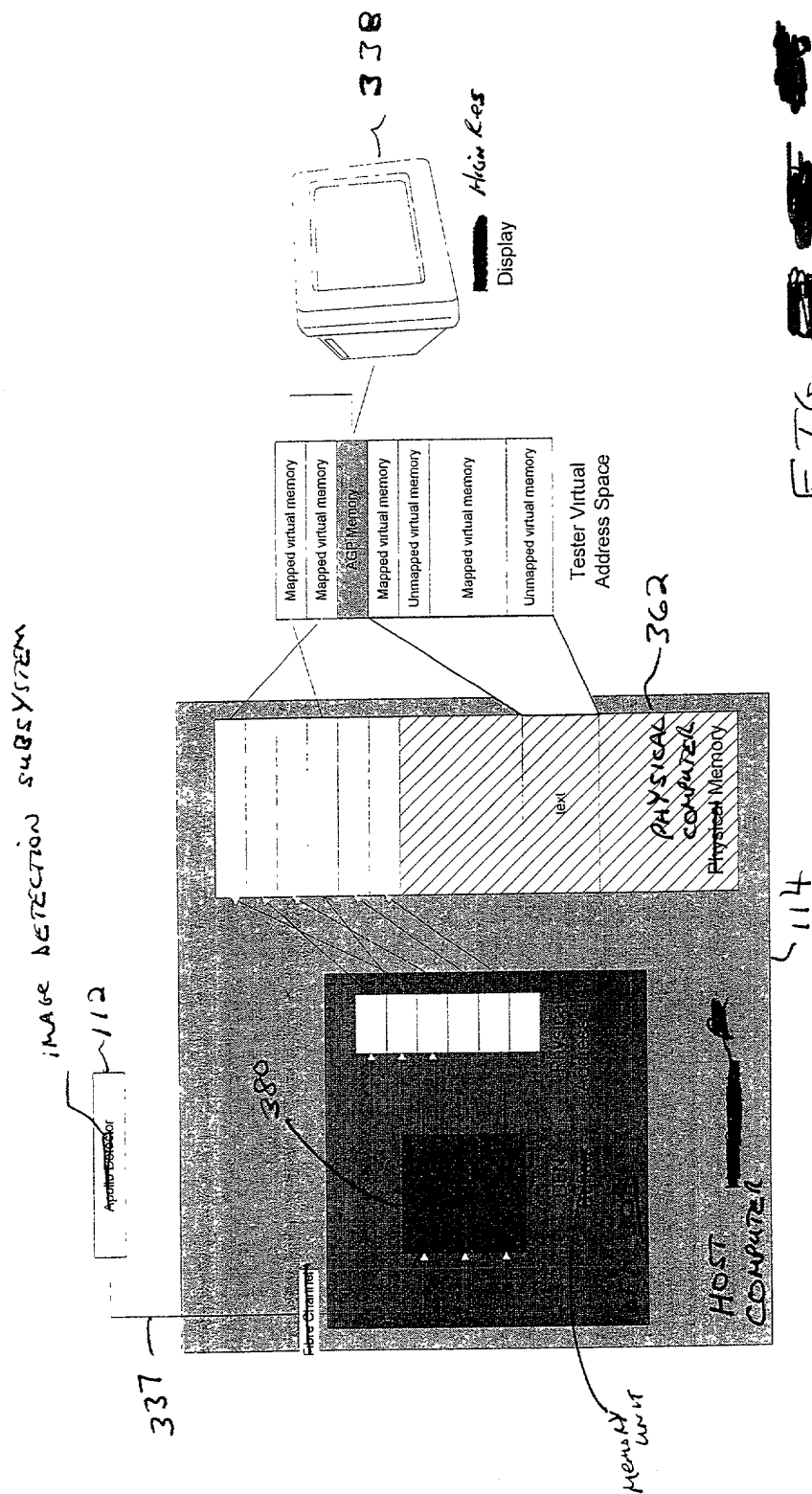


FIG.

44

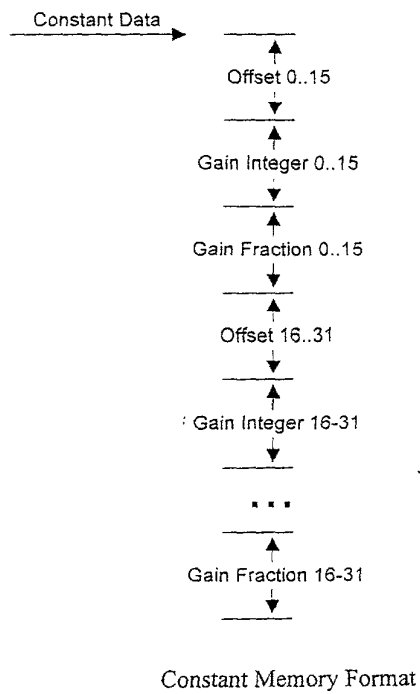
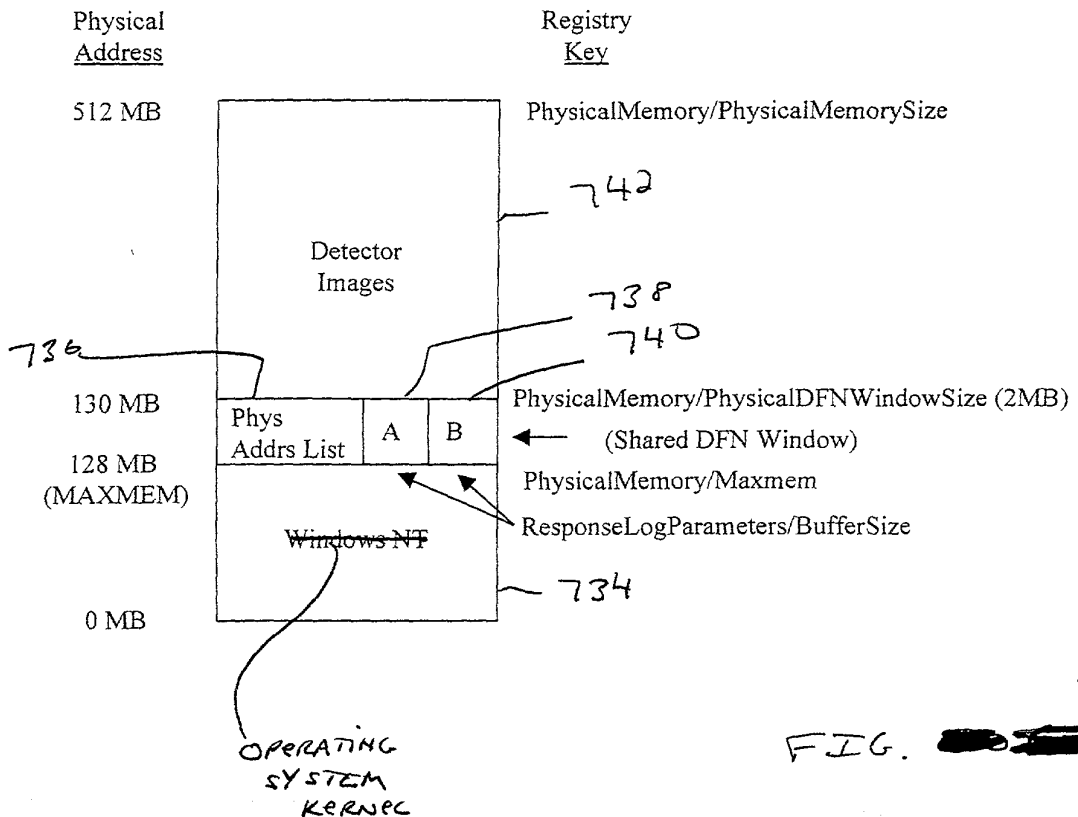
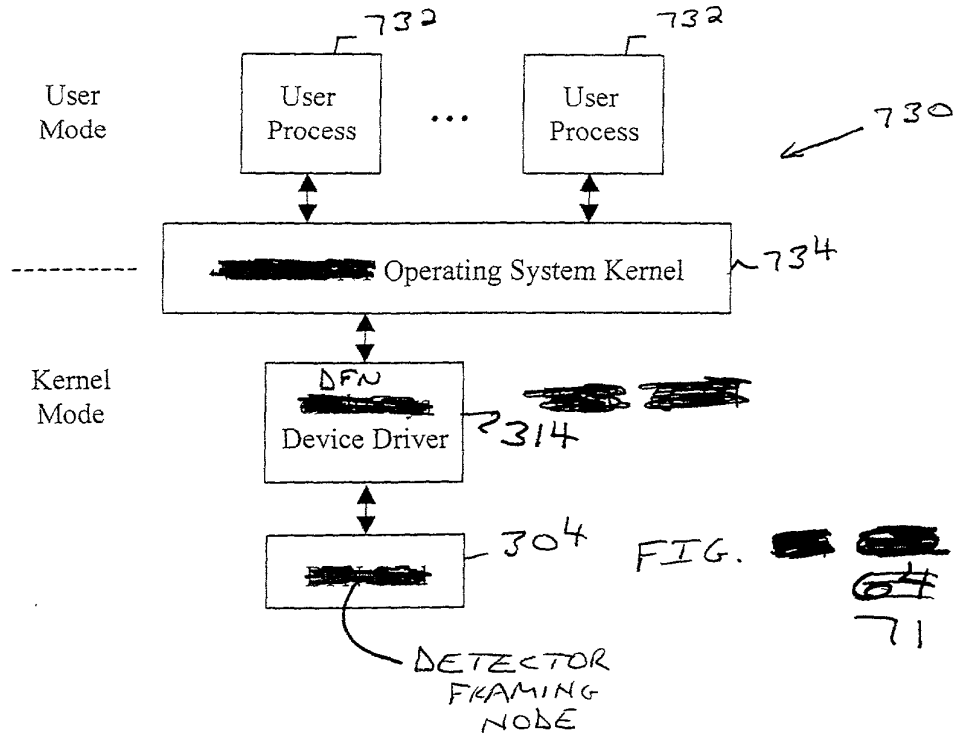


FIG.

70



46

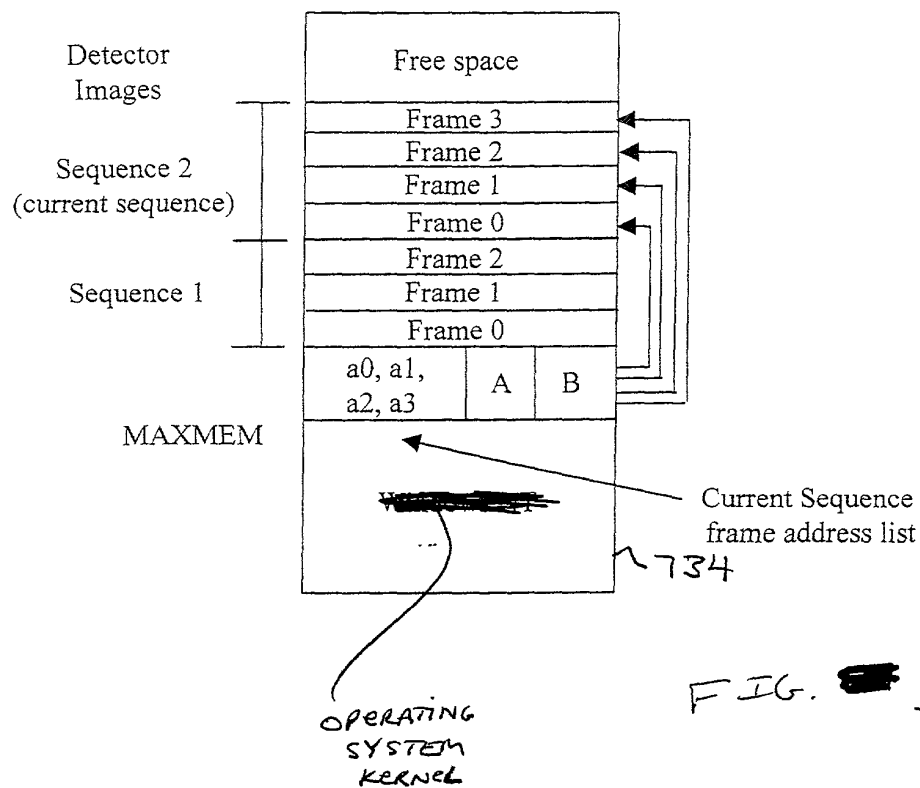


FIG. 73

NOTE: THIS BUG. S/B
ENHANCED, AS PER,
EG. 6, 055, 295

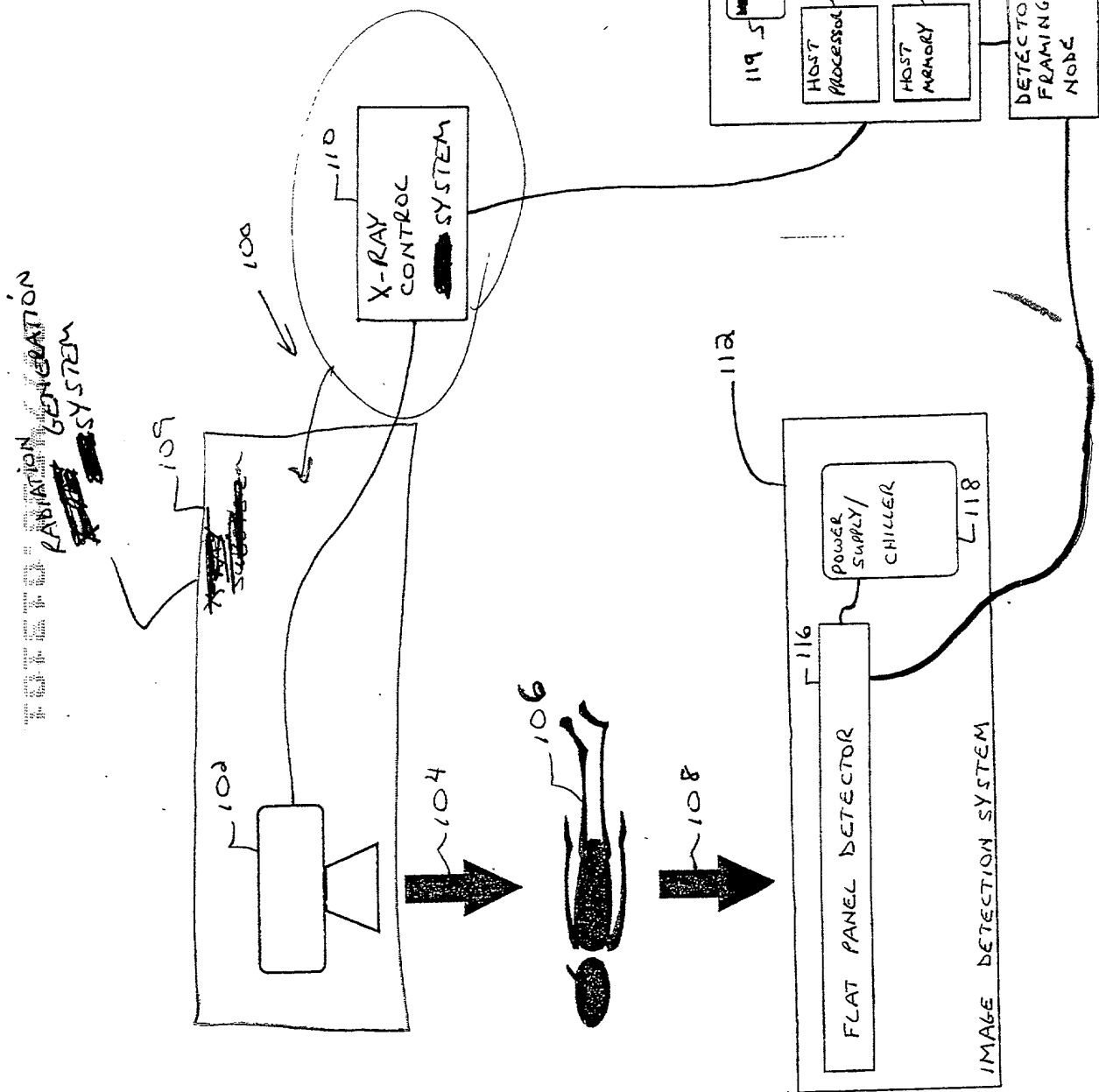


FIG. 1

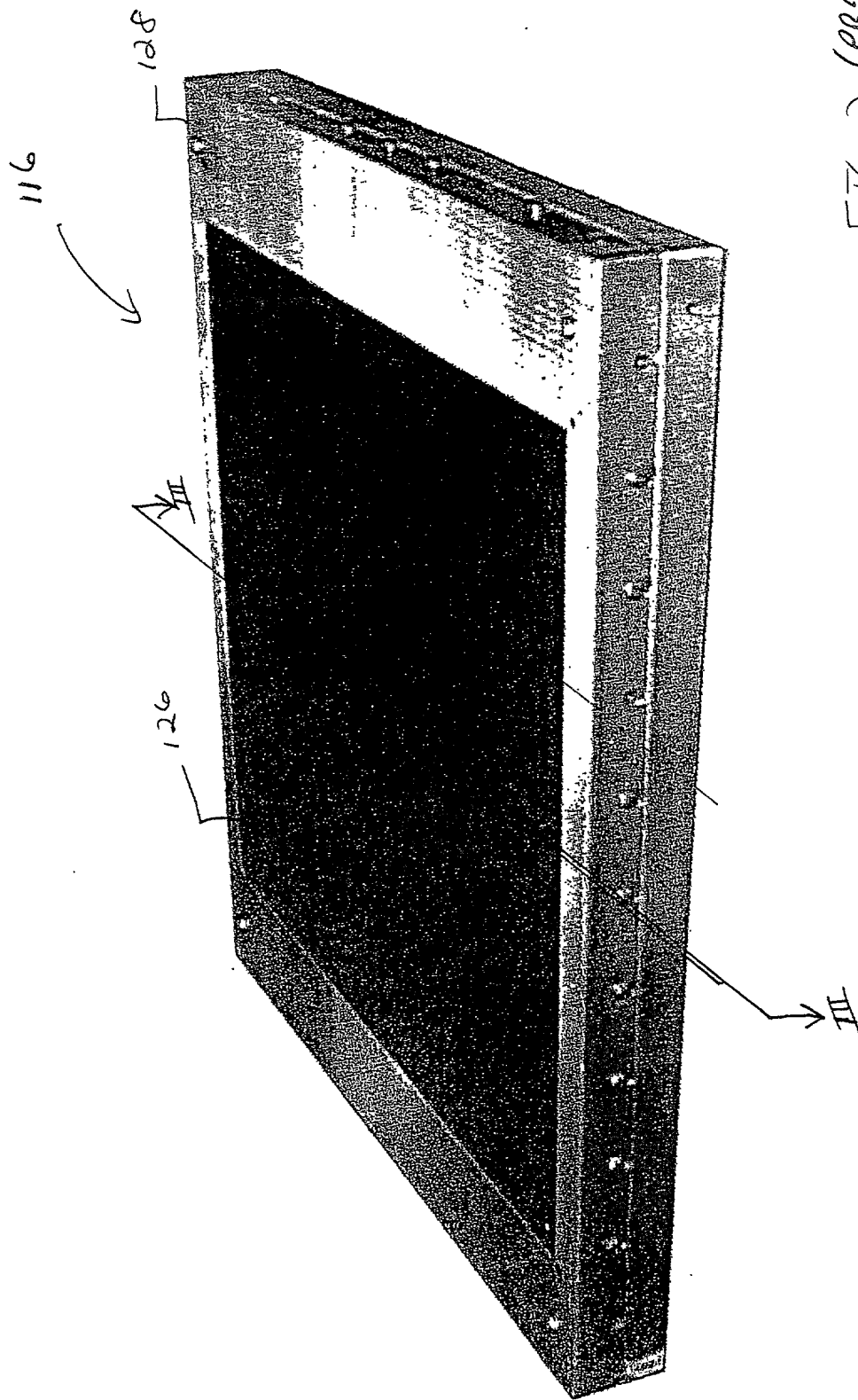


FIG. 2 (PRIOR ART)

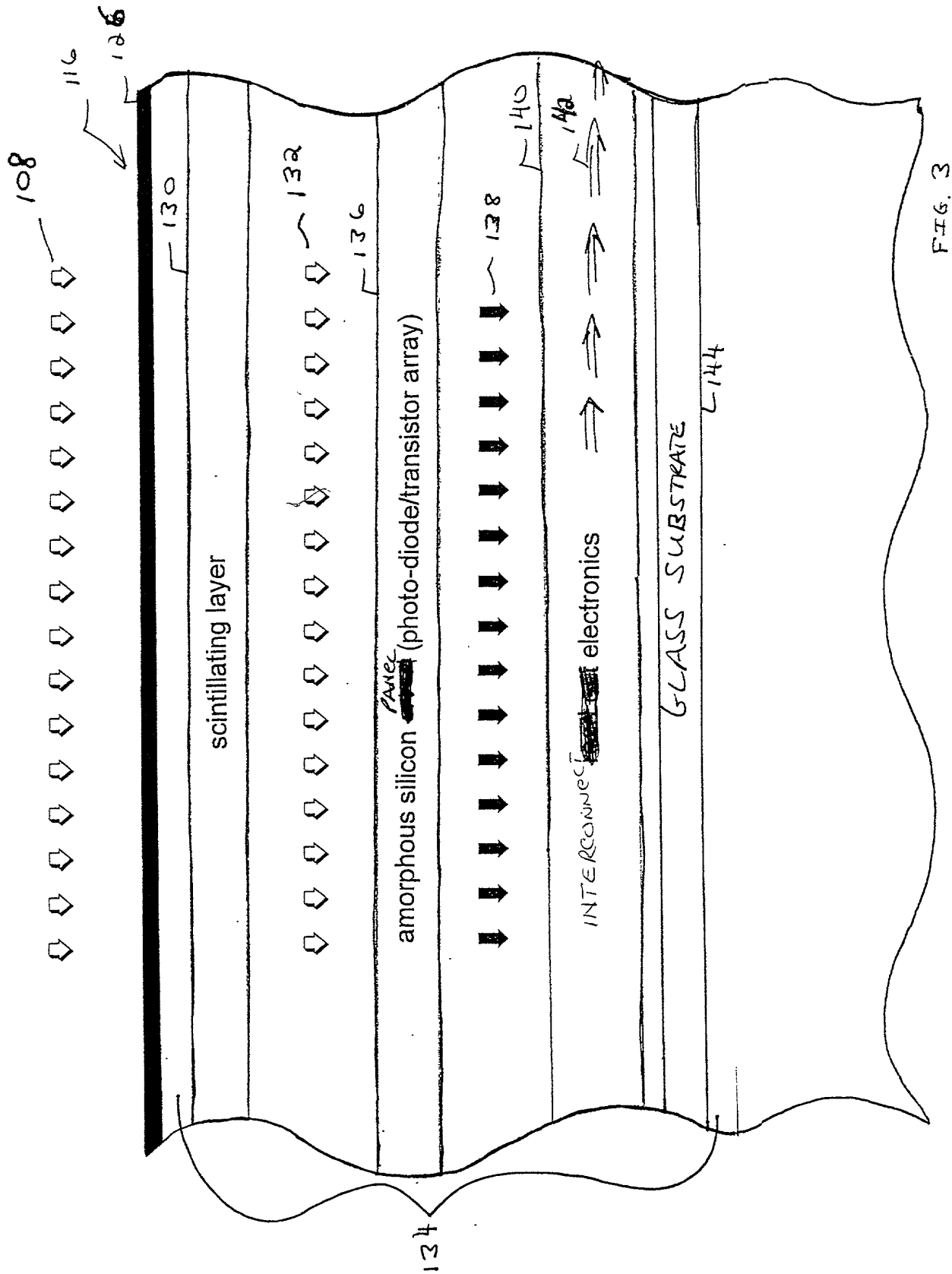


FIG. 3

U.S. PAT. & TM. OFFICE

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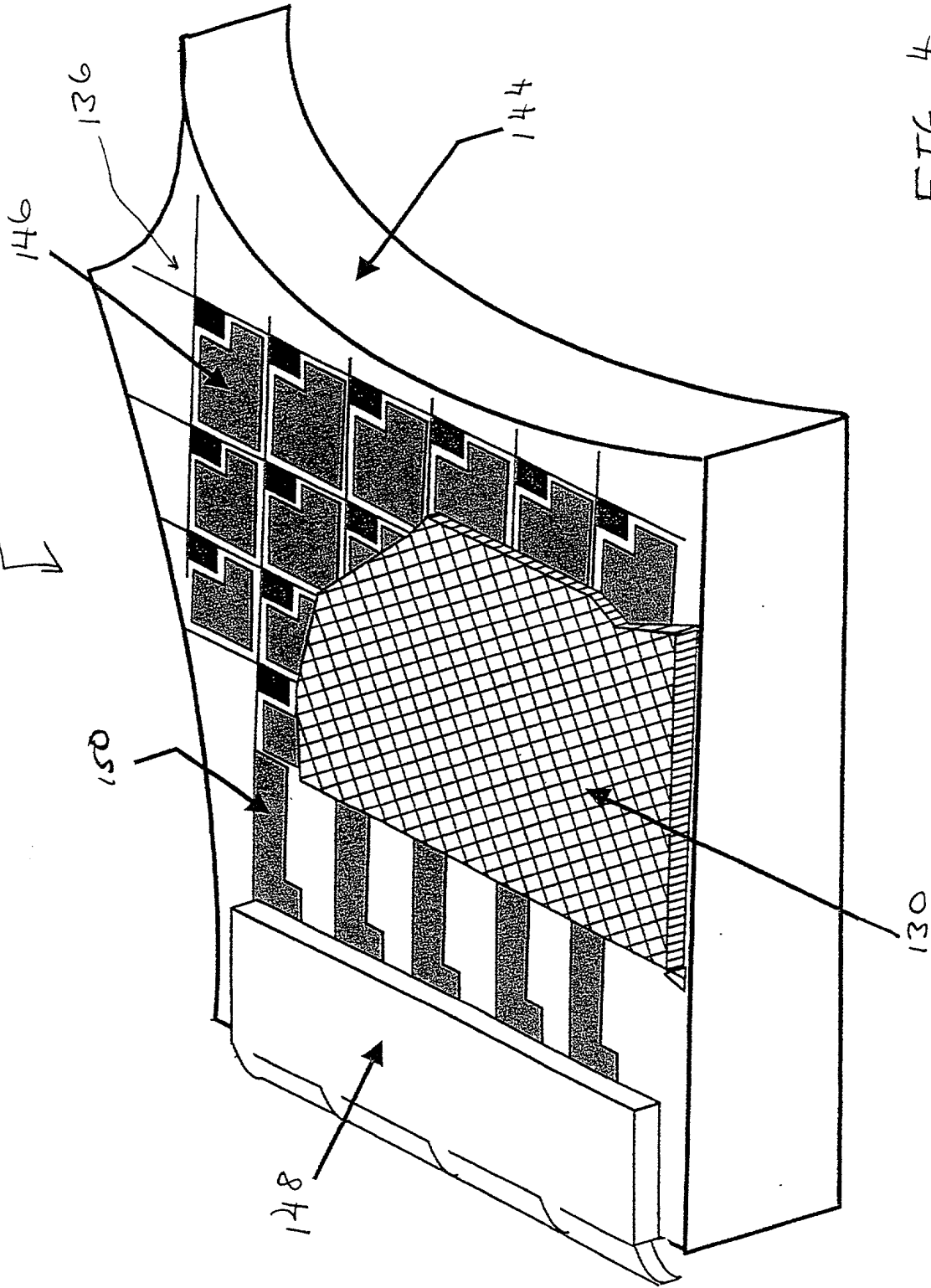


FIG. 4
(PRIOR ART)

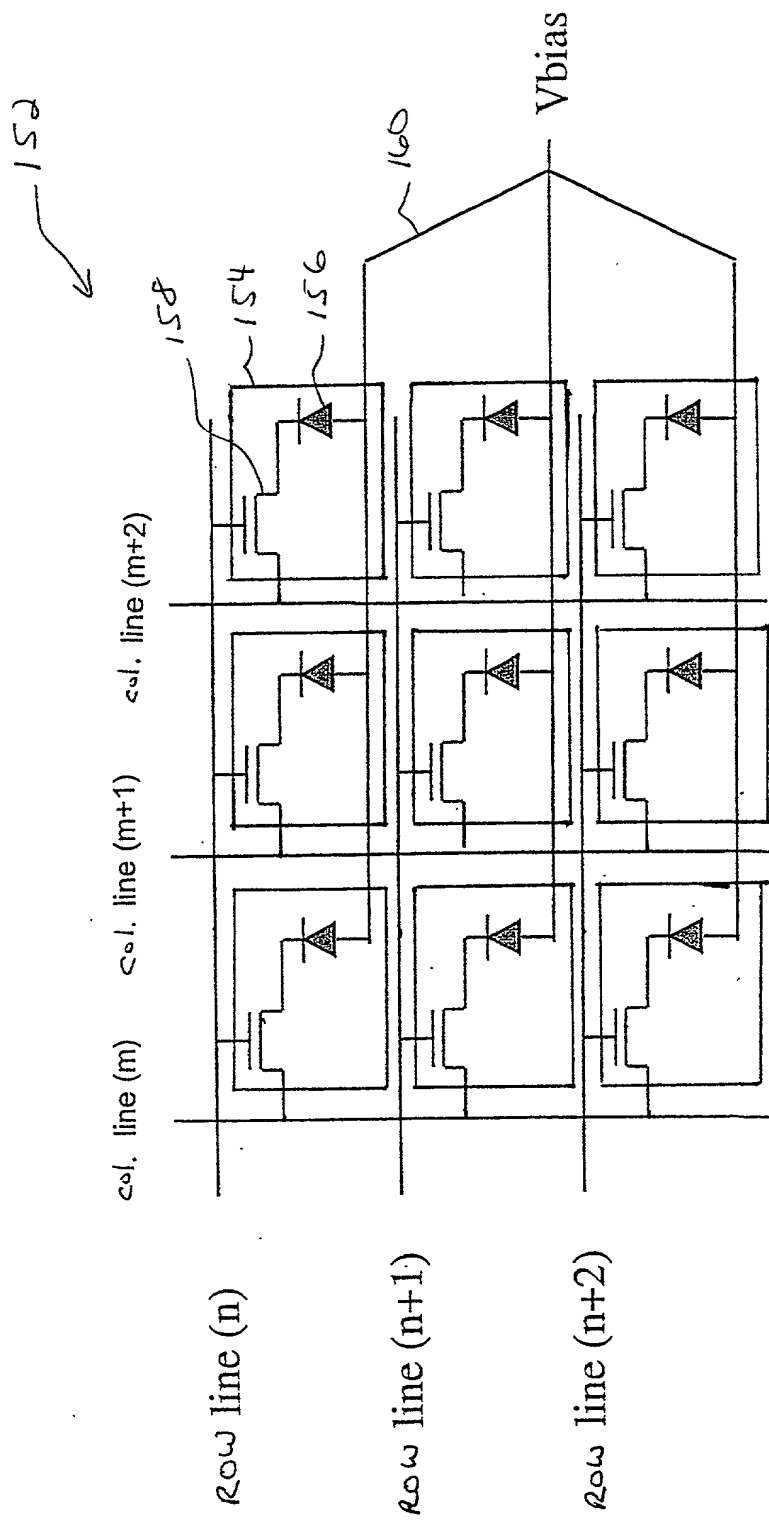


FIG. 5
(Prior Art)

FLAT PANEL DETECTOR

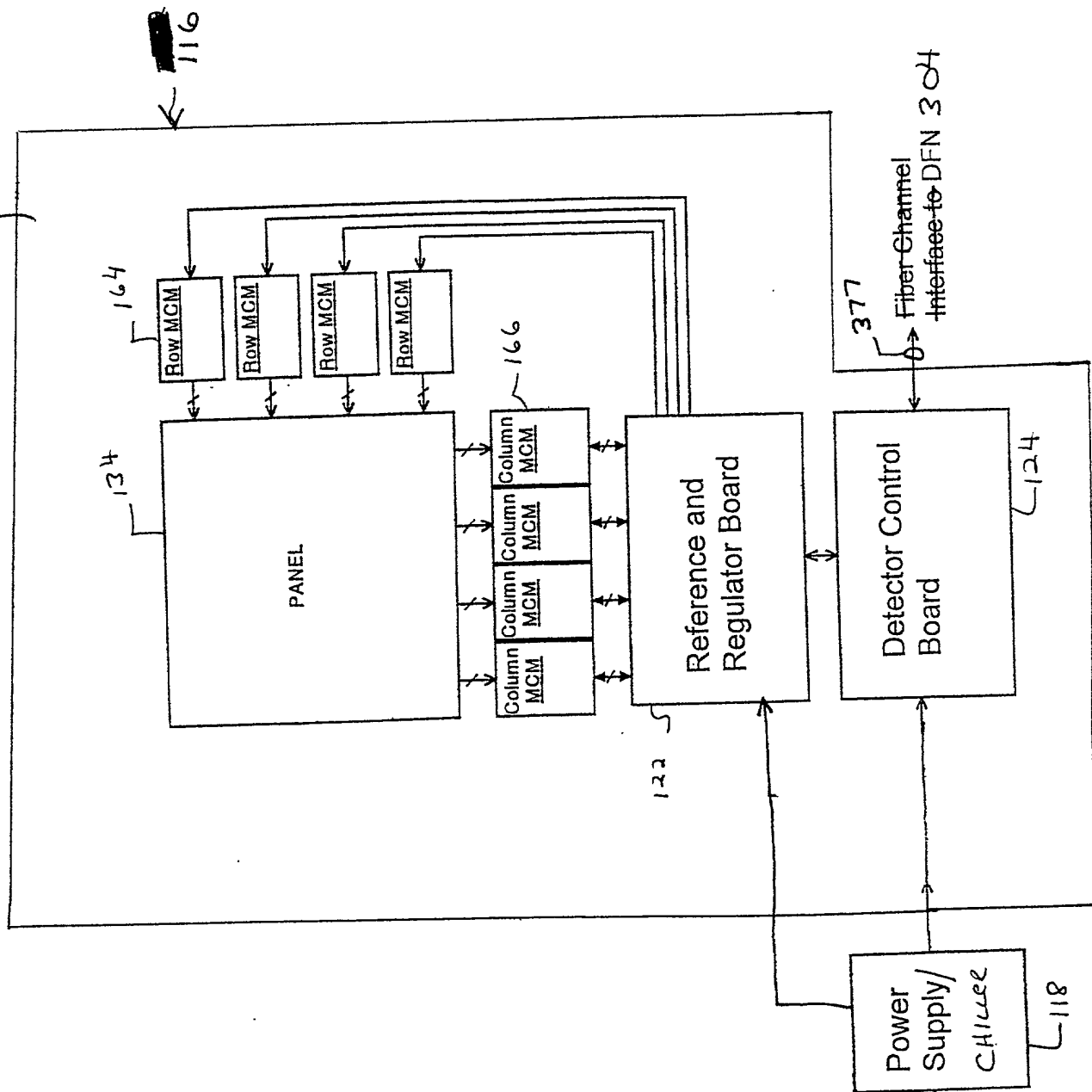


FIG. 6
(PRIOR ART)

FLAT PANEL DETECTOR

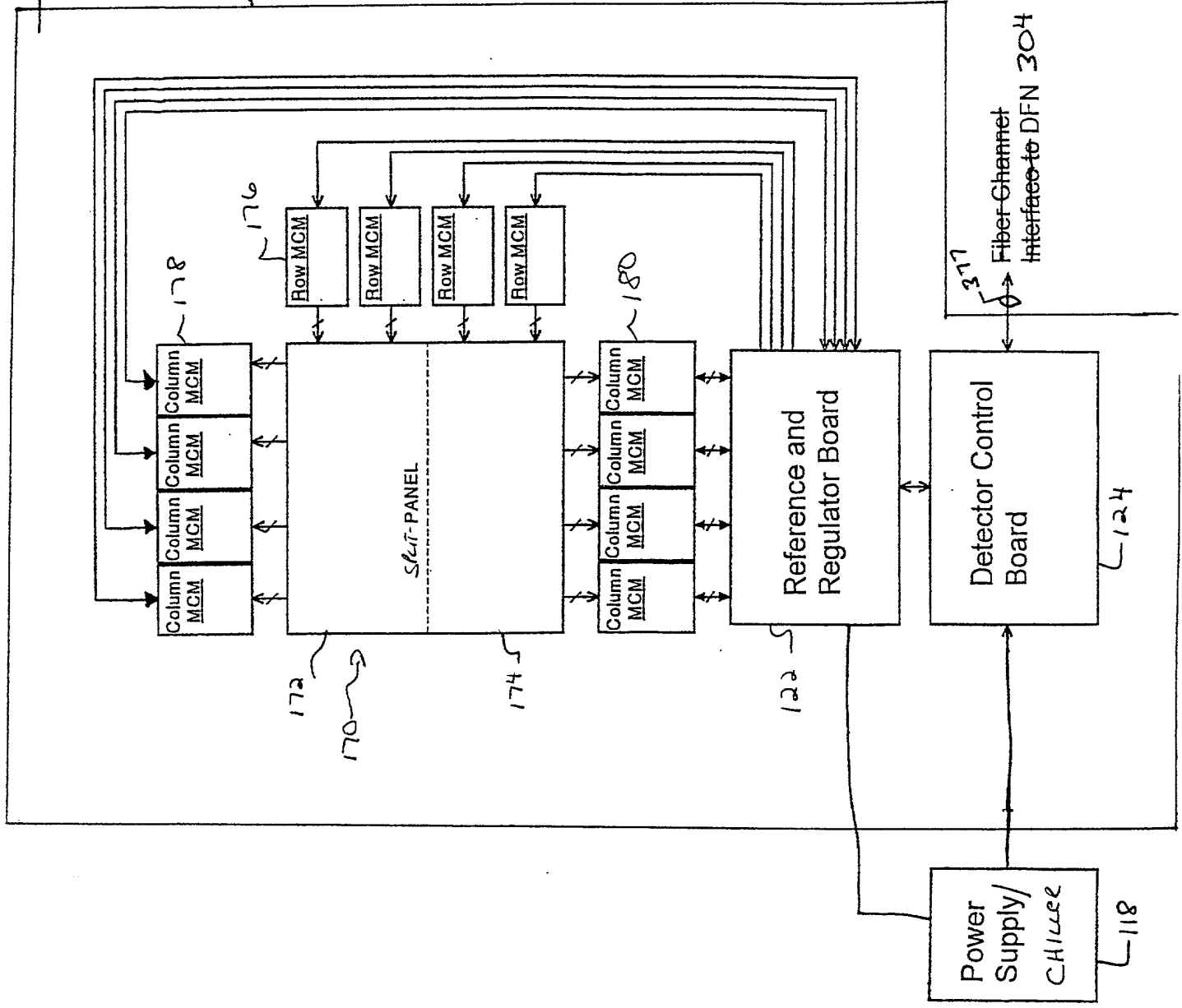
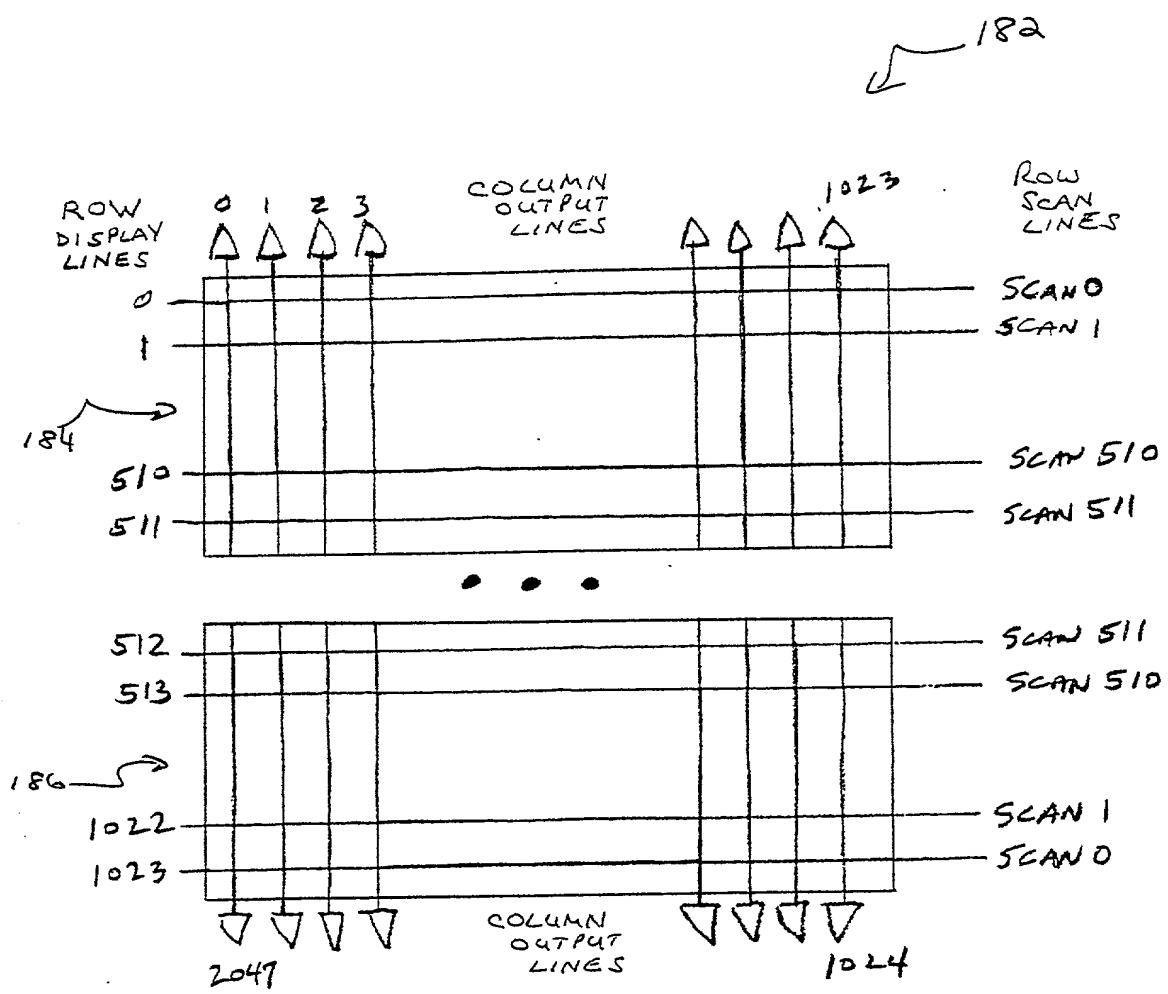


FIG. 7
(PRIOR ART)



CARDIAC/SURGICAL DIGITAL X-RAY PANEL

FIG. 8
(PRIOR ART)

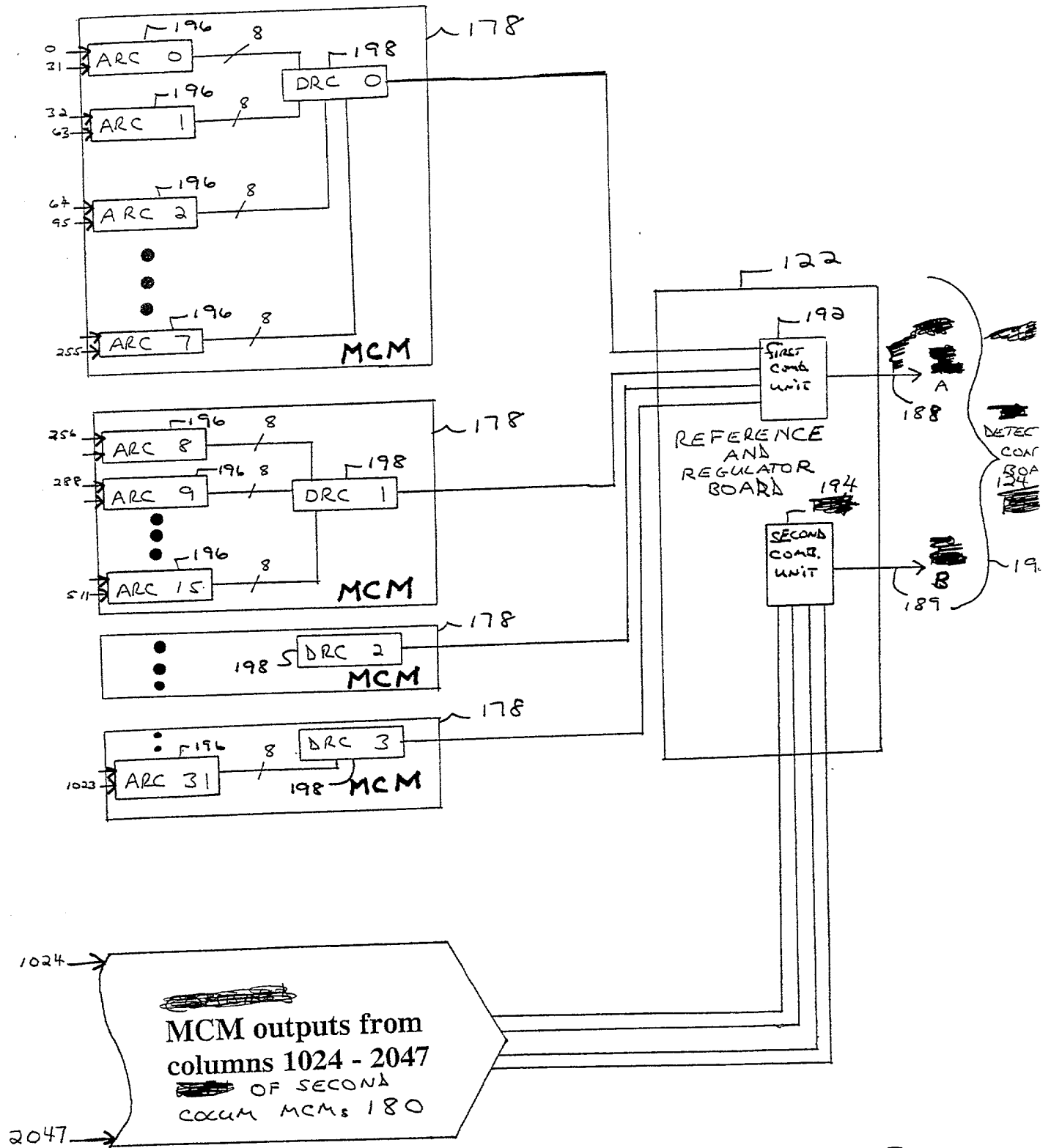


FIG. 9
(PRIOR ART)

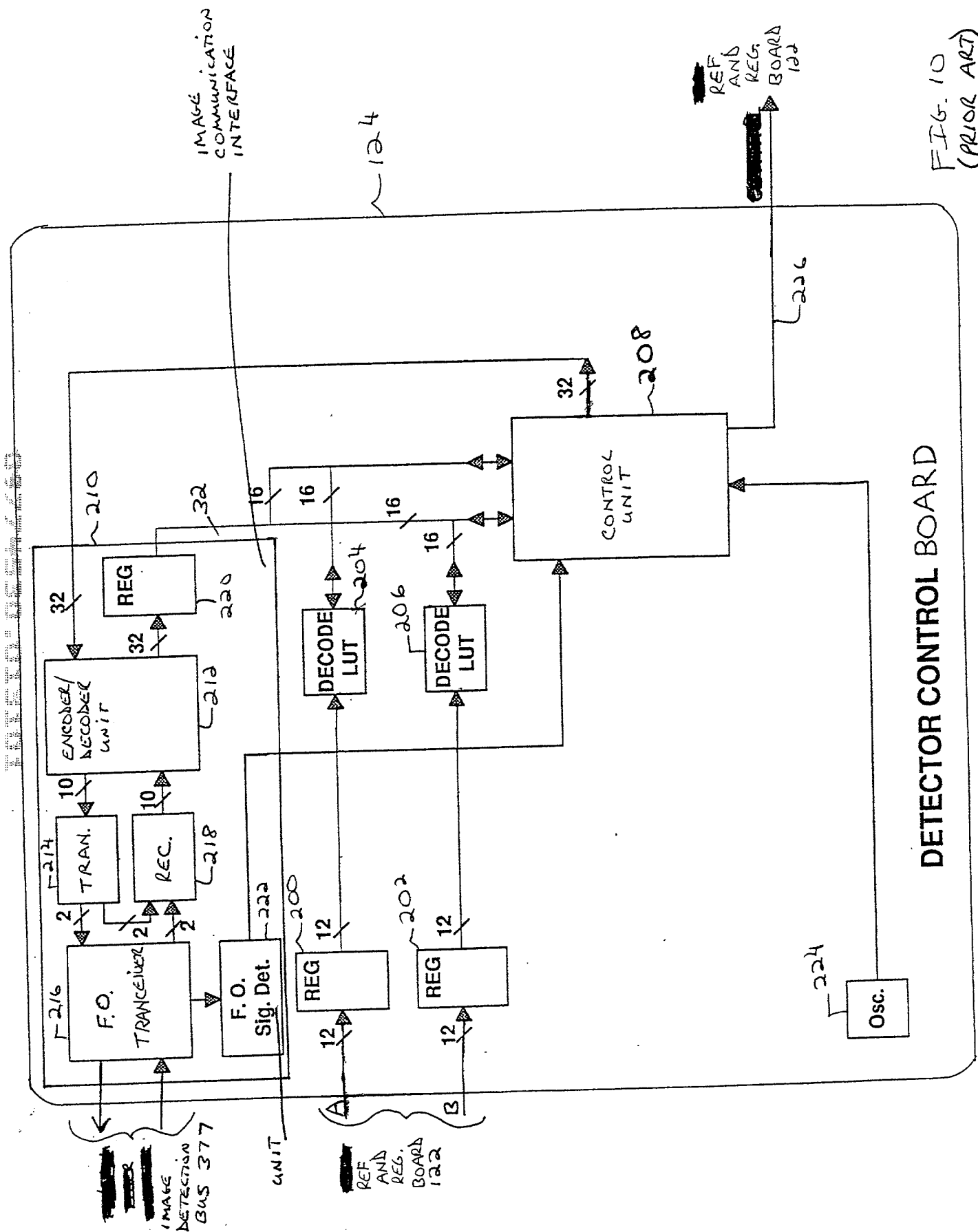
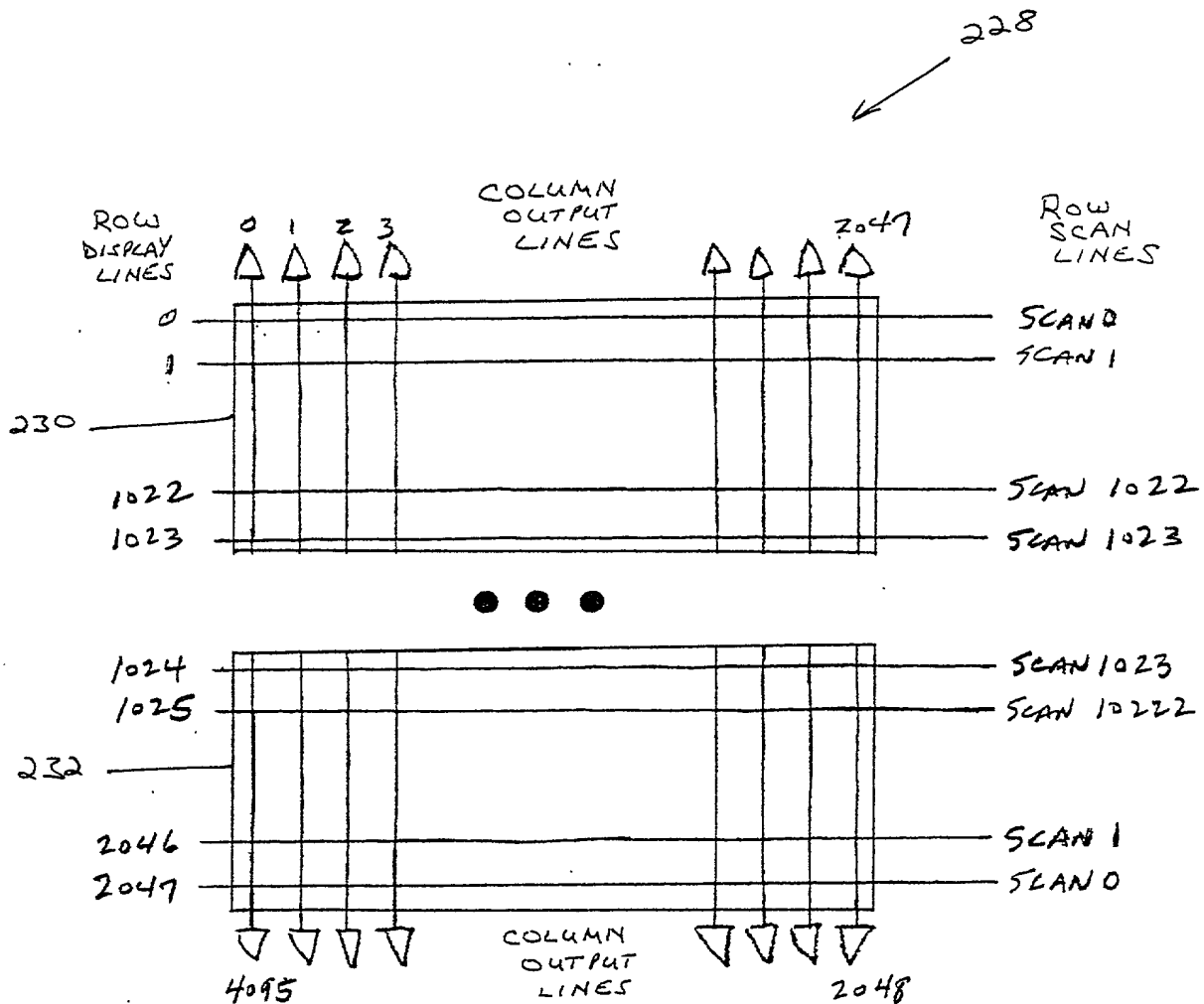


FIG. 10
(PRIOR ART)



RADIOGRAPHY DIGITAL X-RAY PANEL

FIG. 11
(PRIOR ART)

Object	RA	Dec	Distance	Size	Shape	Color	Notes
NGC 1068	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1069	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1070	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1071	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1072	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1073	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1074	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1075	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1076	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1077	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1078	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1079	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1080	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1081	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1082	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1083	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1084	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1085	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1086	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1087	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1088	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1089	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1090	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1091	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1092	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1093	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1094	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1095	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1096	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1097	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1098	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1099	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1100	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1101	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1102	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1103	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1104	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1105	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1106	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1107	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1108	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1109	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1110	12 15 10	+15 15 10	1.5	1.5	1.5	1.5	1.5
NGC 1111							

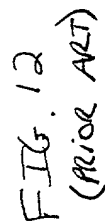
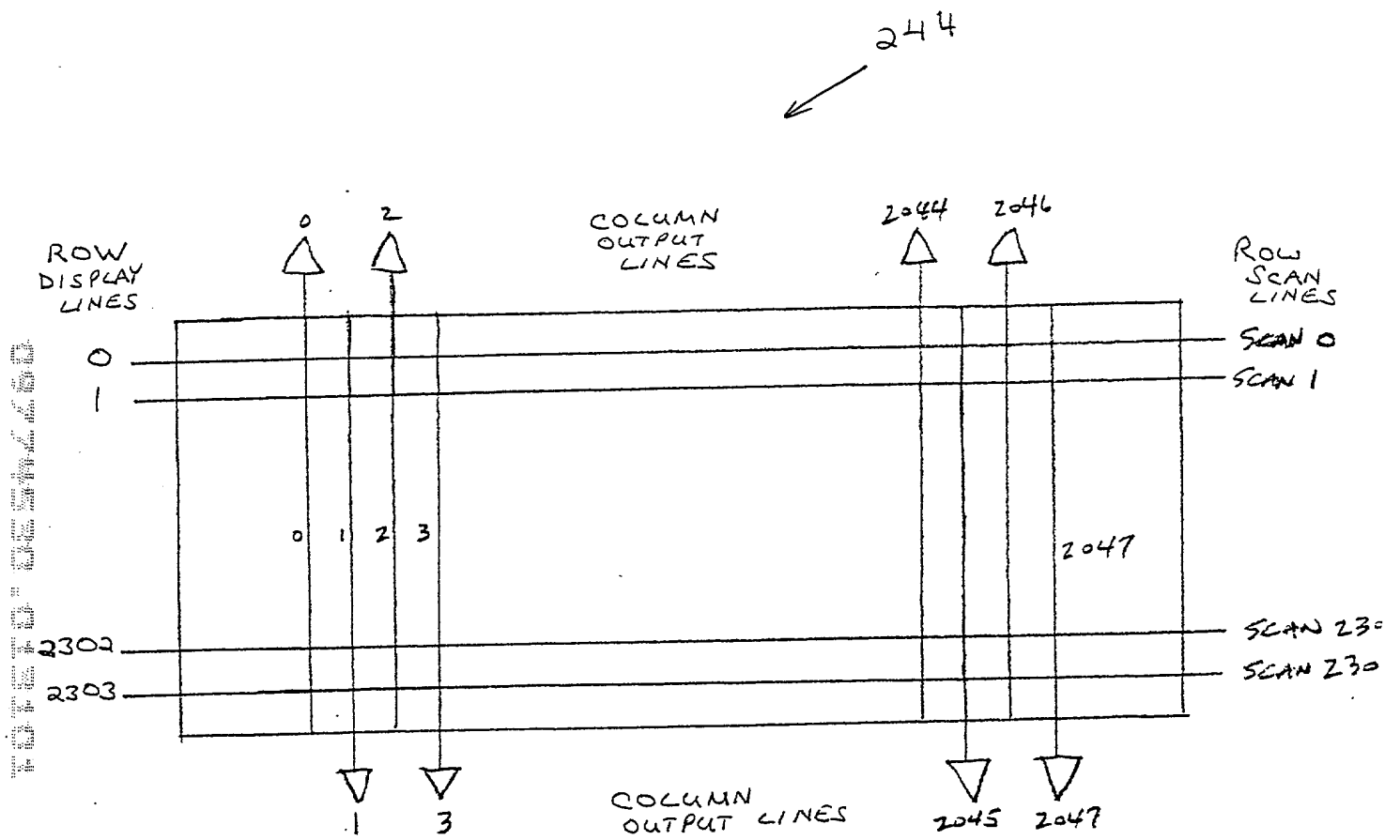


FIG. 12
(PRIOR ART)



MAMOGRAPHY DIGITAL X-RAY PANEL

FIG. 13
(PRIOR ART)

FLAT PANEL
DETECTOR

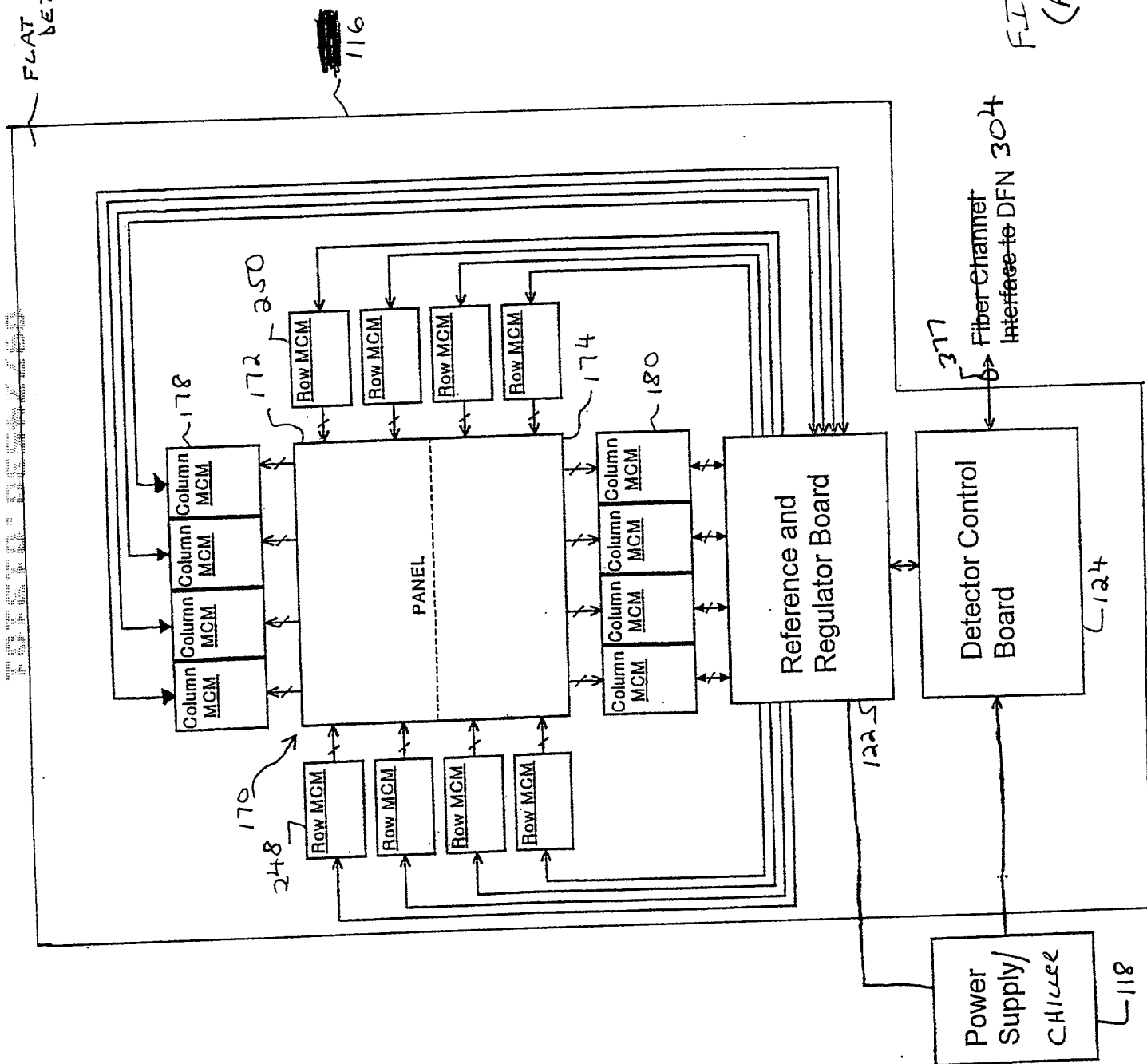
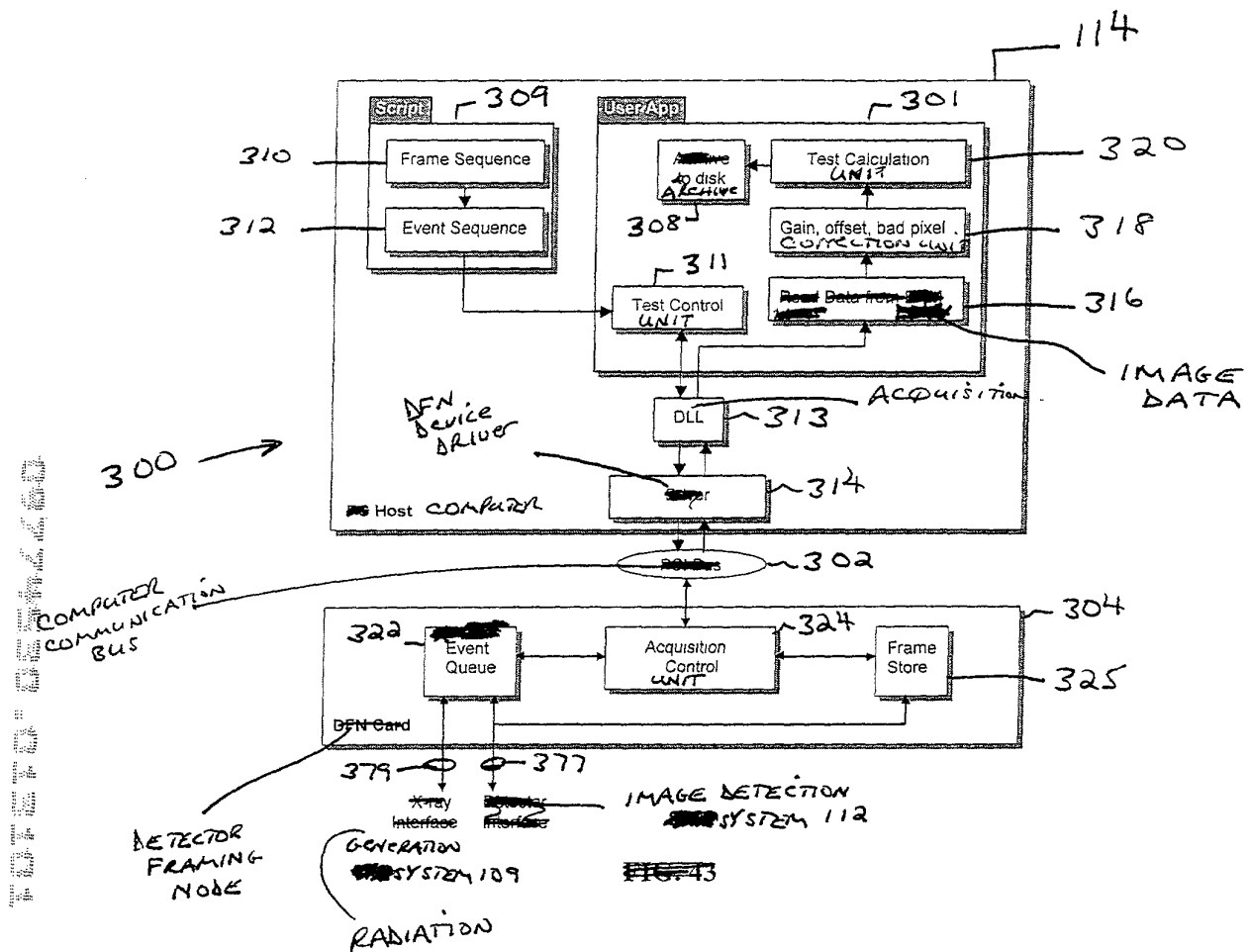


FIG. 14
(PRIOR ART)



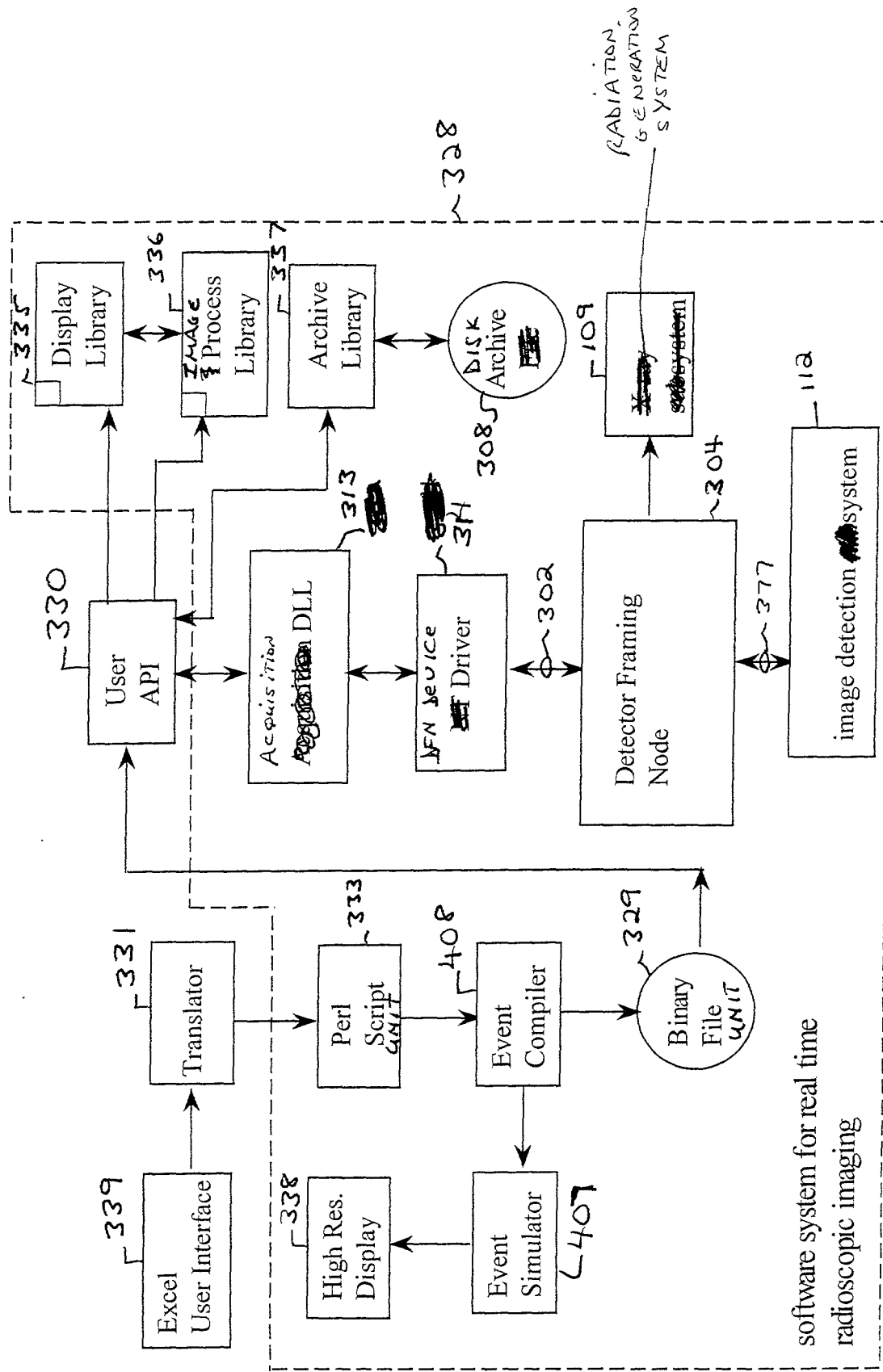


FIG. 16

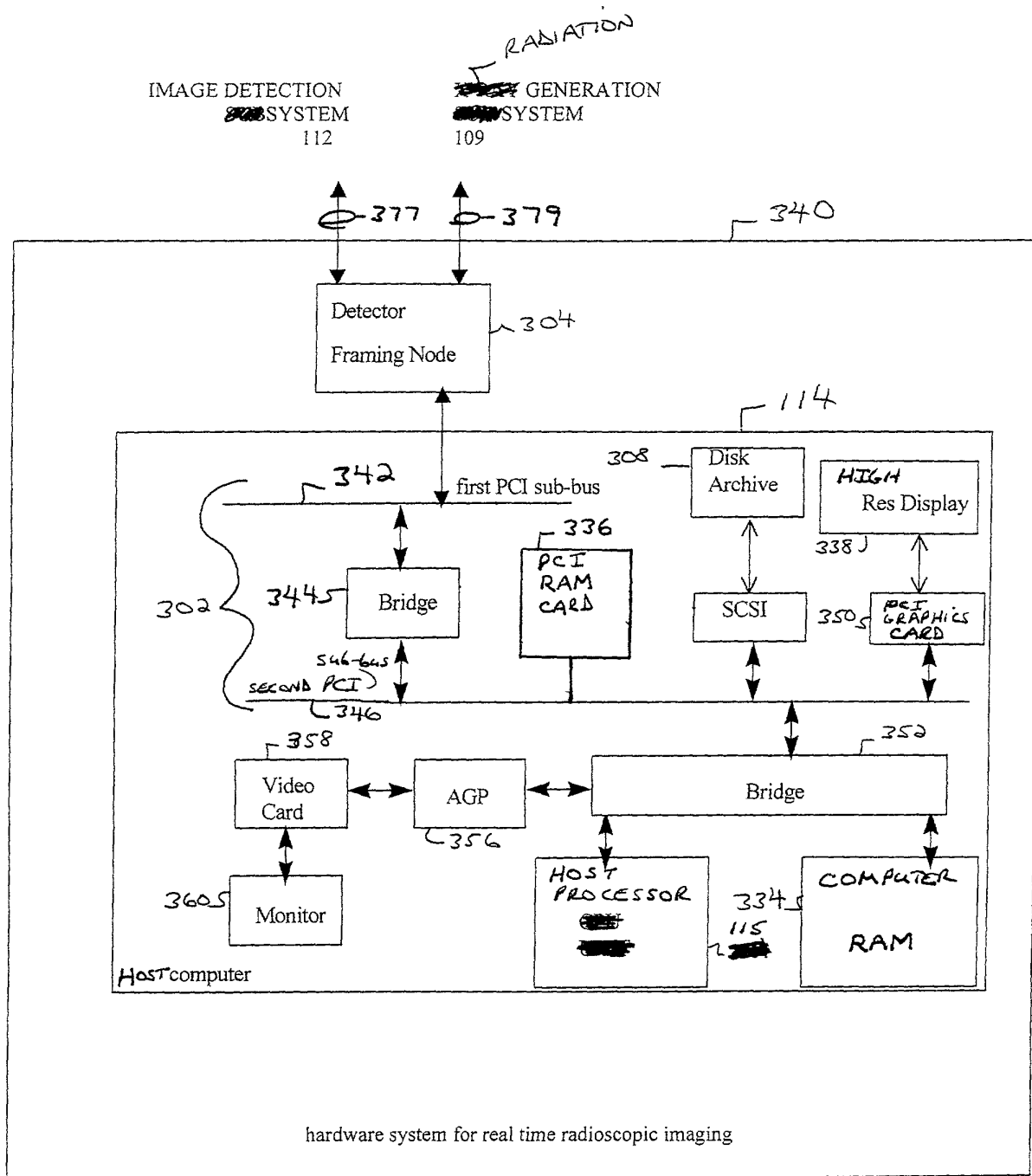


FIG. 17

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FRAME BUFFER MEMORY

FRAME BUFFER MEMORY

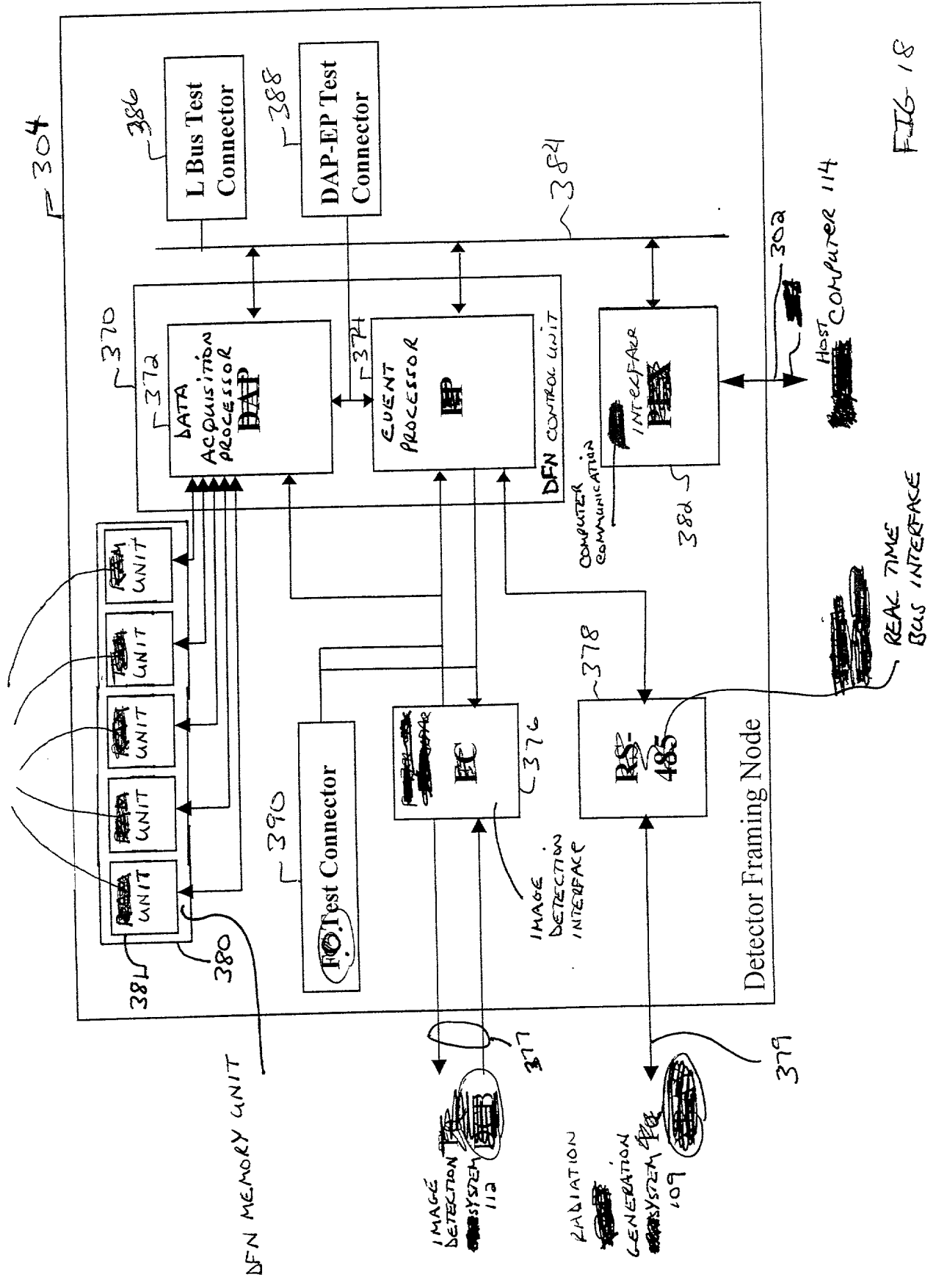


FIG-18

Panel Setup	Real Time	(fm/sec)	length	Latency	memory	offset	gbr
Single Frame	Post Process	30	unlimited	< 5 frames	host	none	
Single Frame	Post Process	-	-	Delay ~.1 sec	"	y	
		-	-	Delay ~ 2 sec	"	y	y
Real Time	Real Time	R	Unlimited	< 5 frames	host	none	
Real Time	Real Time	R - X	Unlimited	< 5 frames	"	y	
Real Time	Real Time	R - Y	Unlimited	< 5 frames	"	y	y

FIG. 19

Modality	image size	Frames Stored
Cardiac	1024 x 1024	host memory
Rad	2048 x 2048	200
Mamm o	2304 x 2048	50
		44

FIG. 20

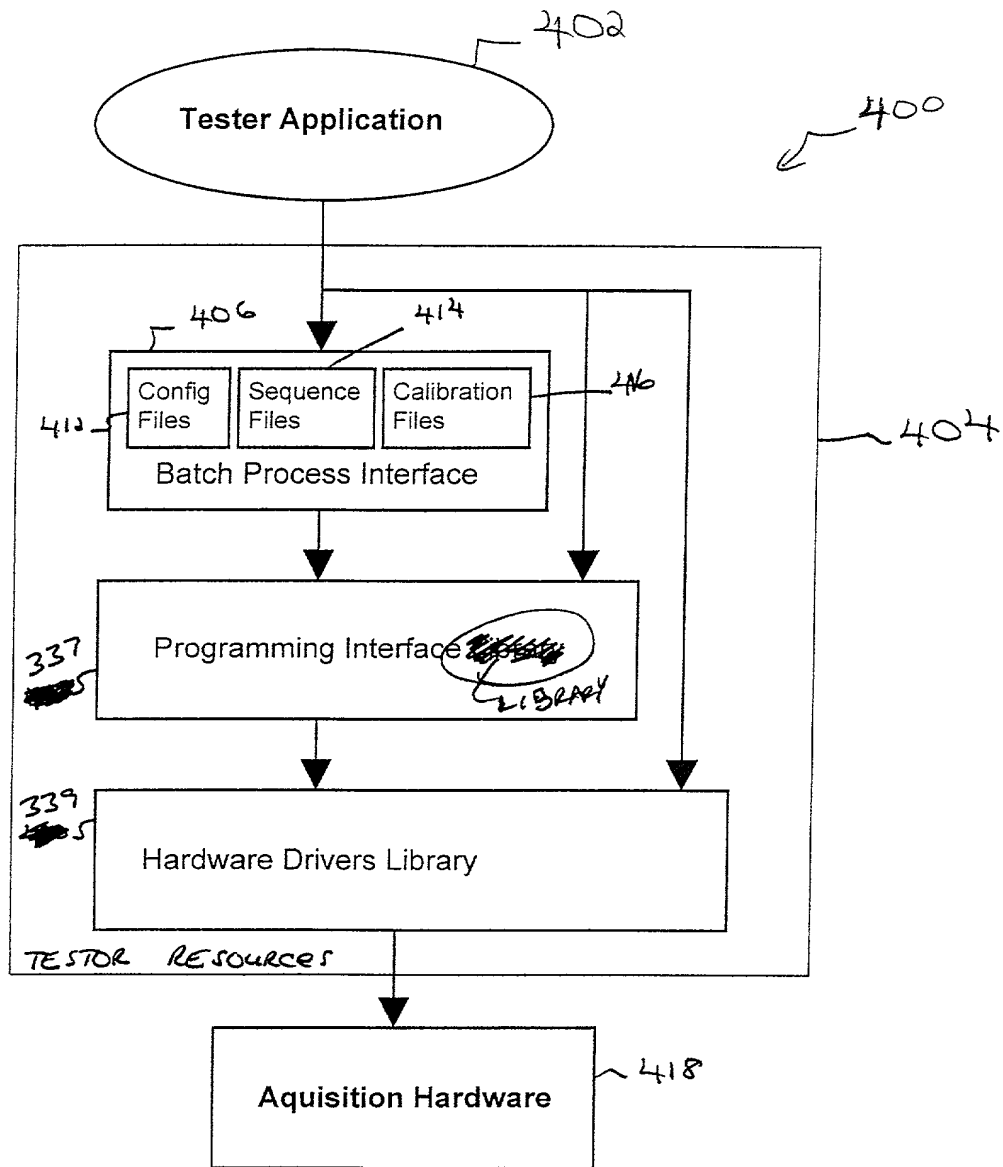


FIG. 21

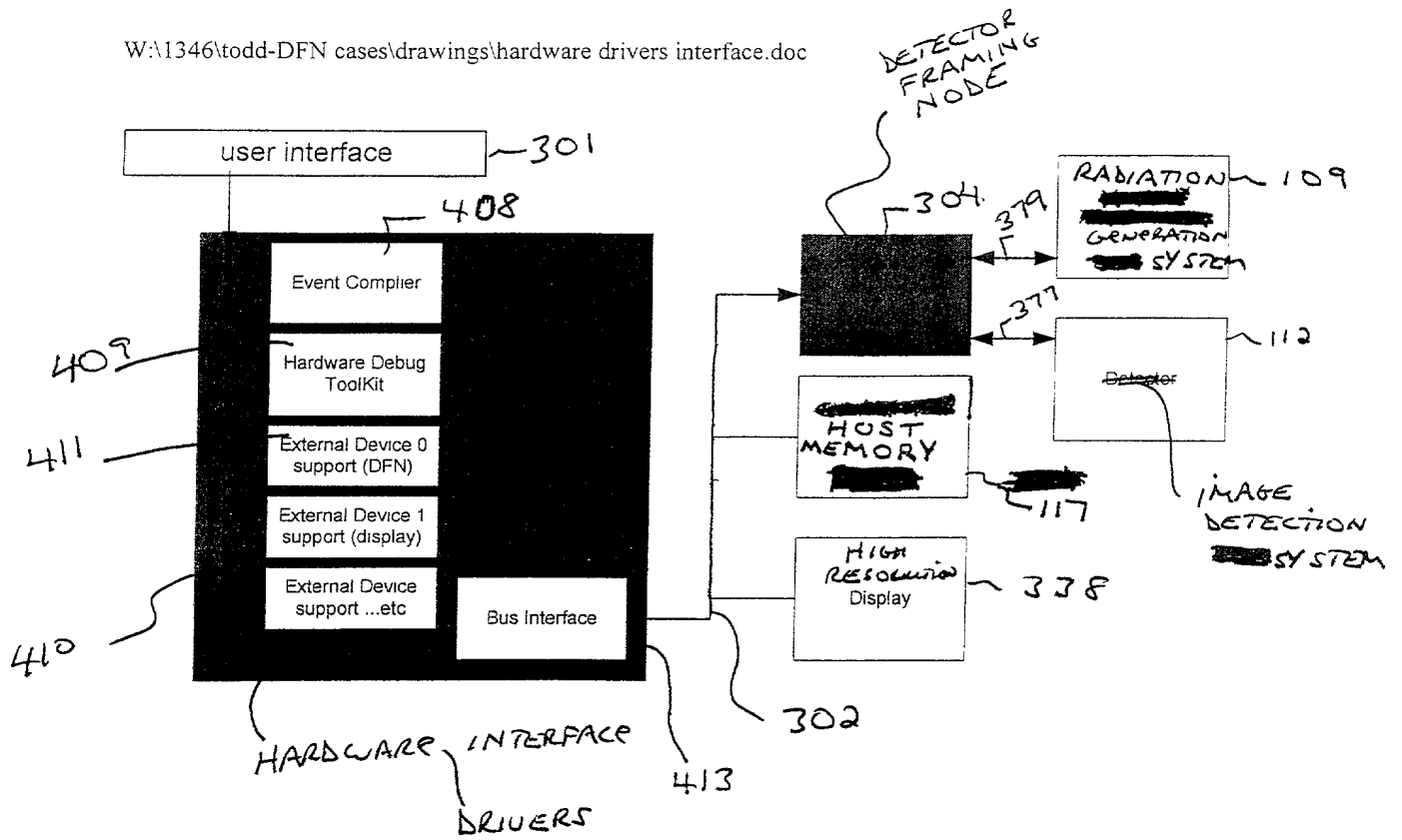


FIG. 22

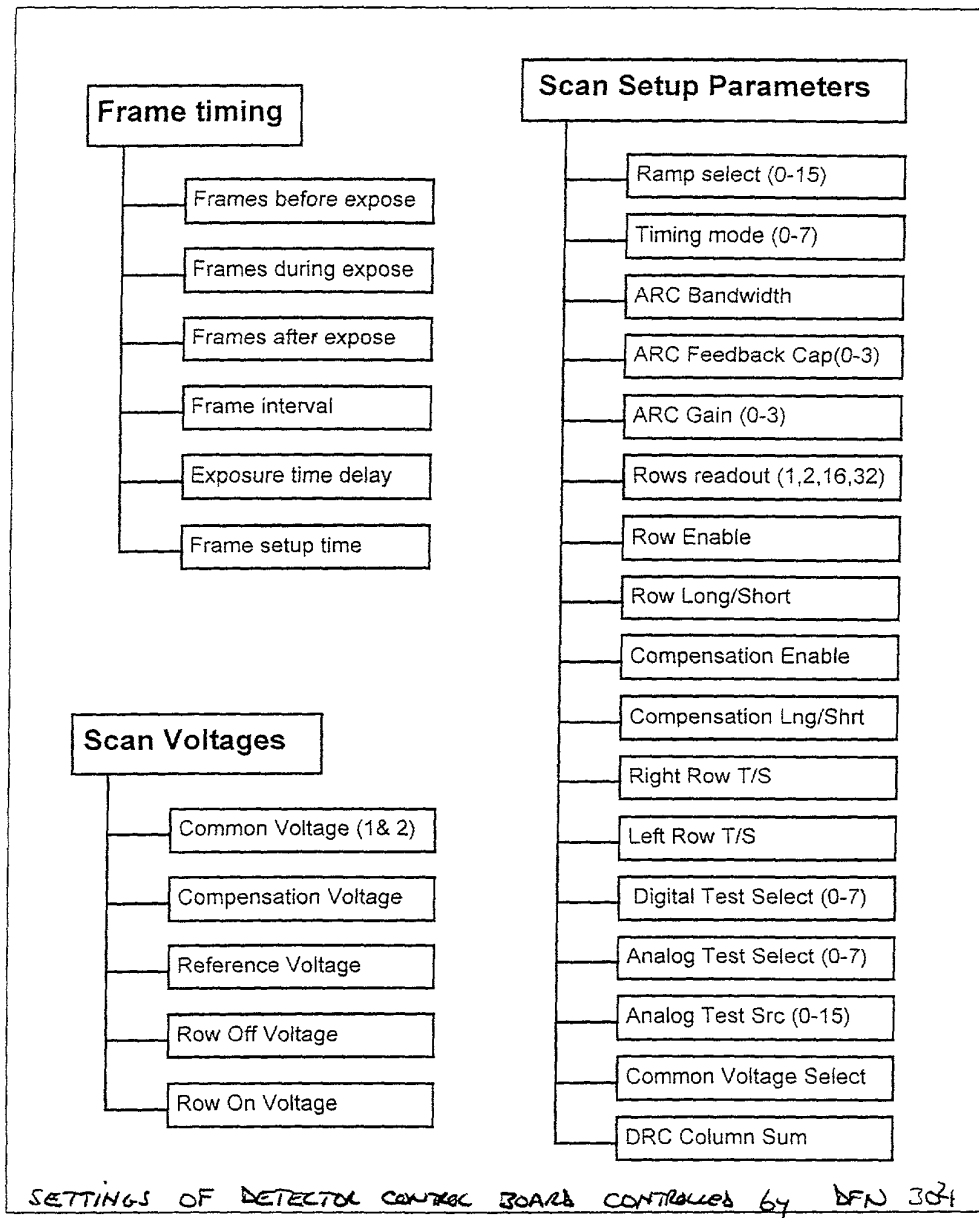


FIG. 23

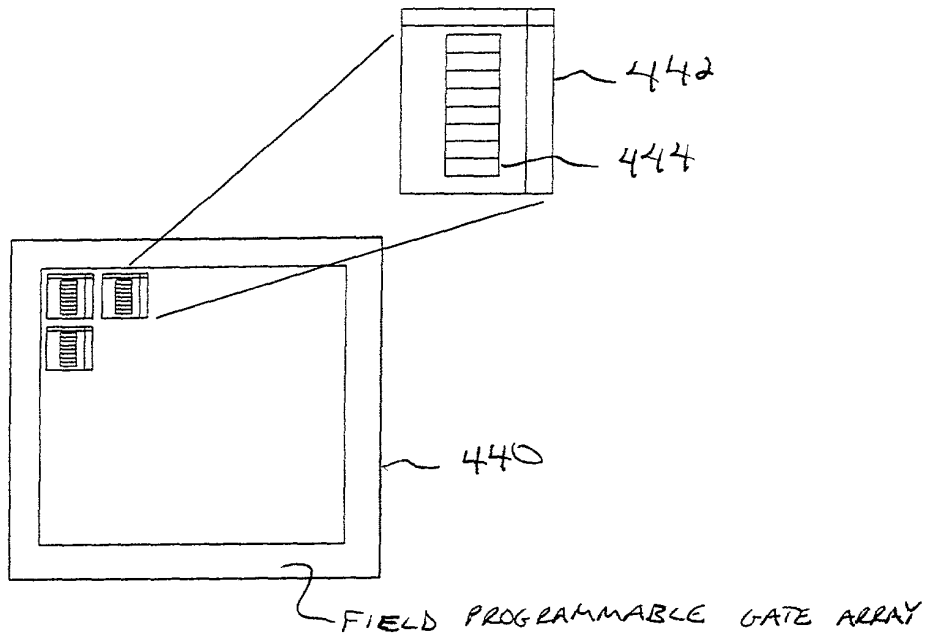


FIG. ~~23~~ 24

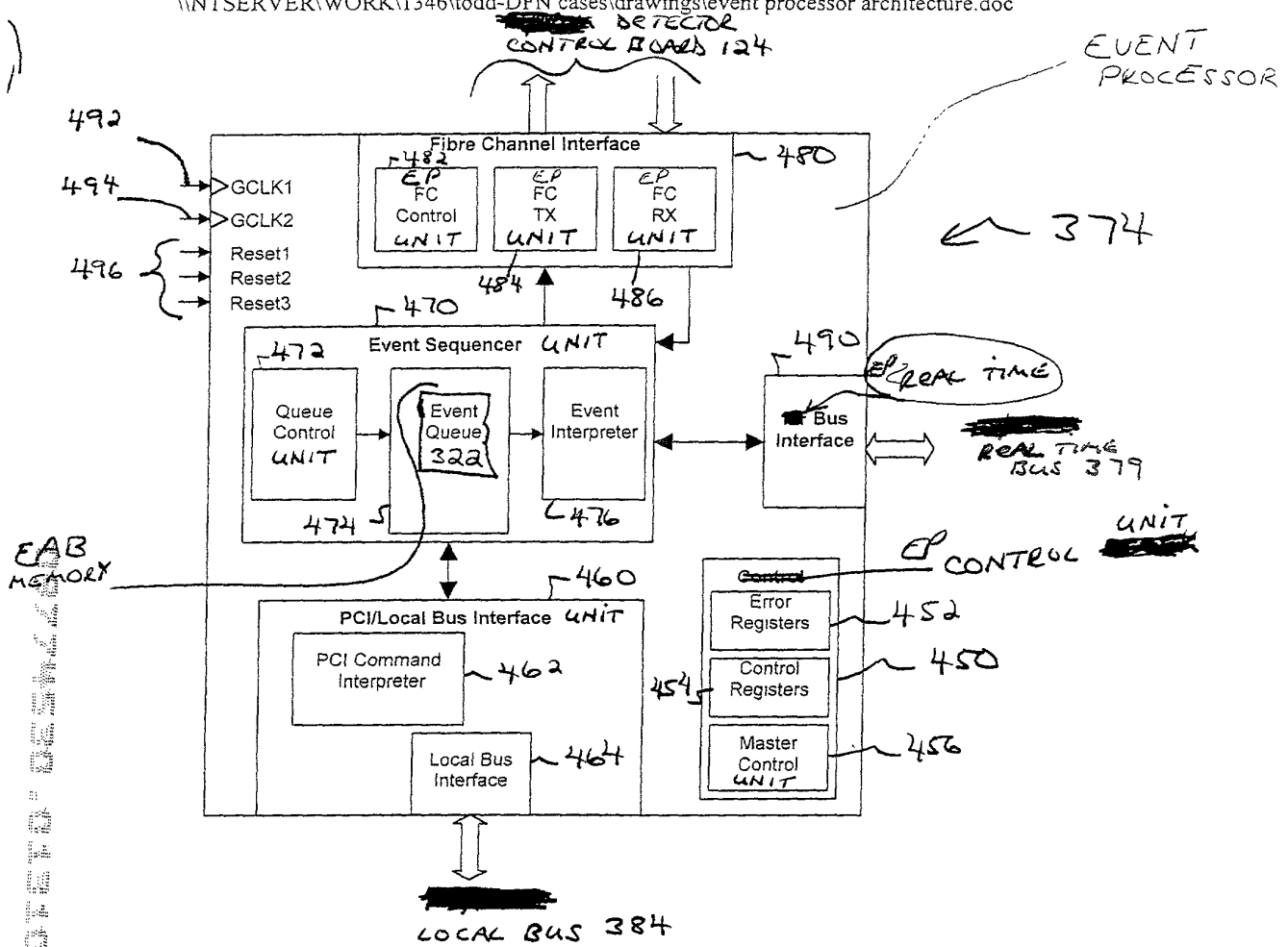


FIG. 25

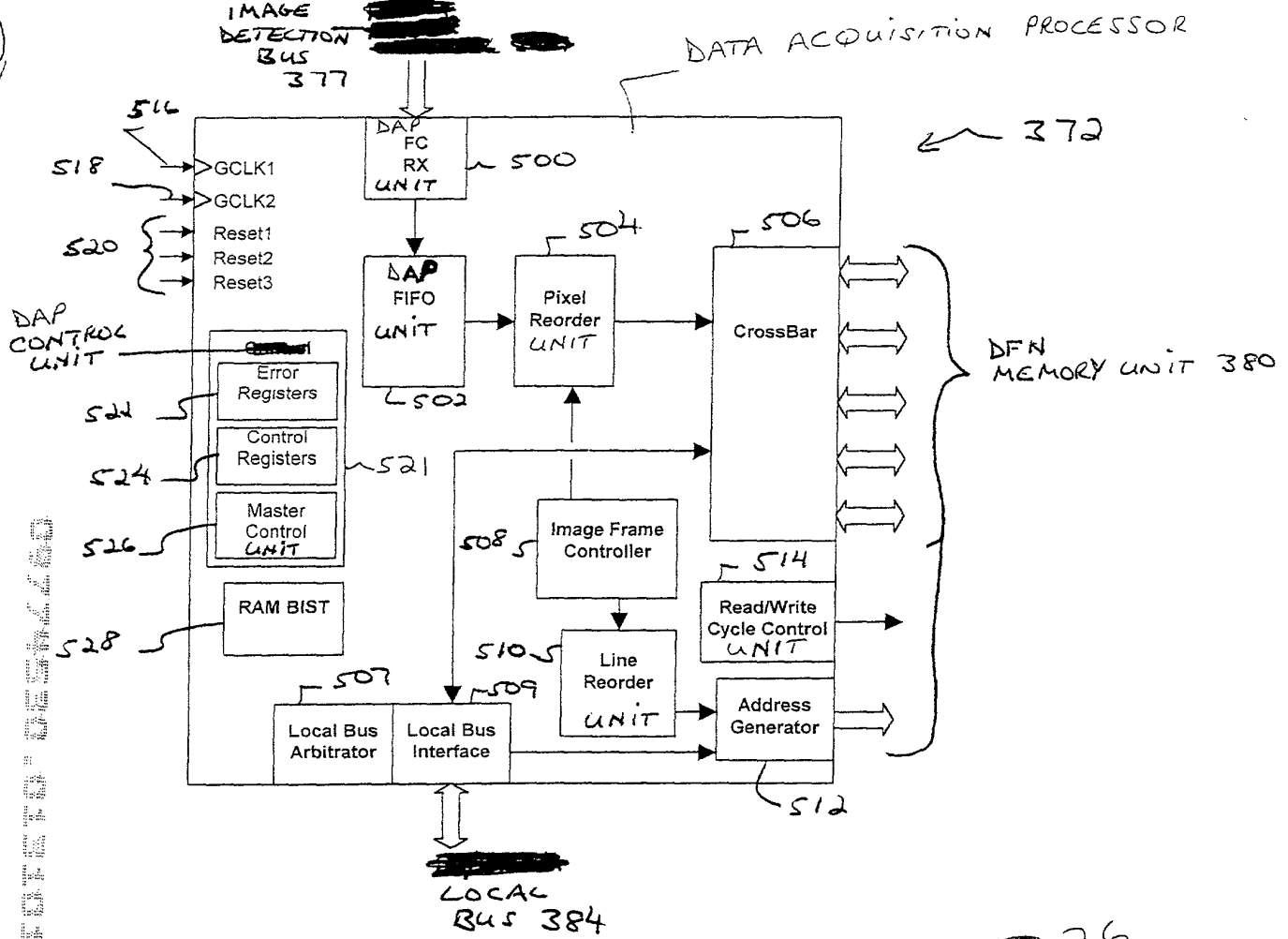


FIG. 26

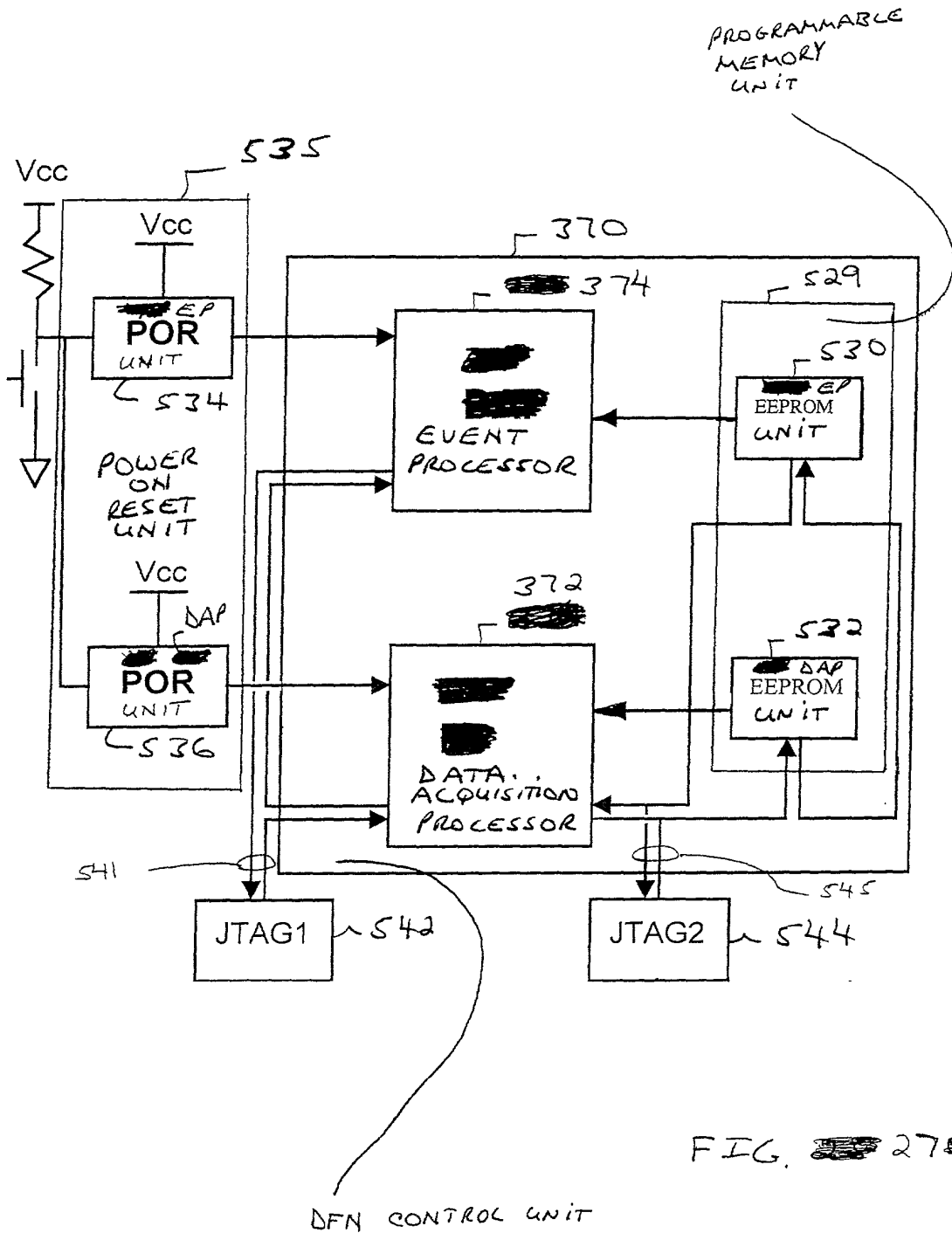


FIG. 27

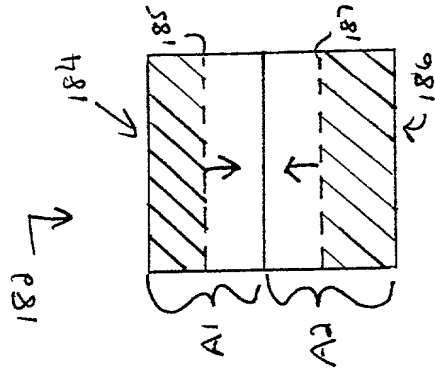


FIG. 28A
28

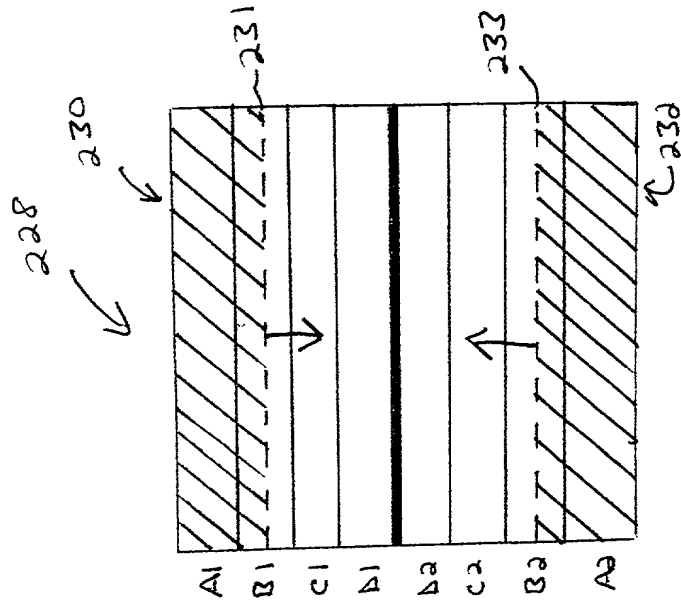


FIG. 29
29

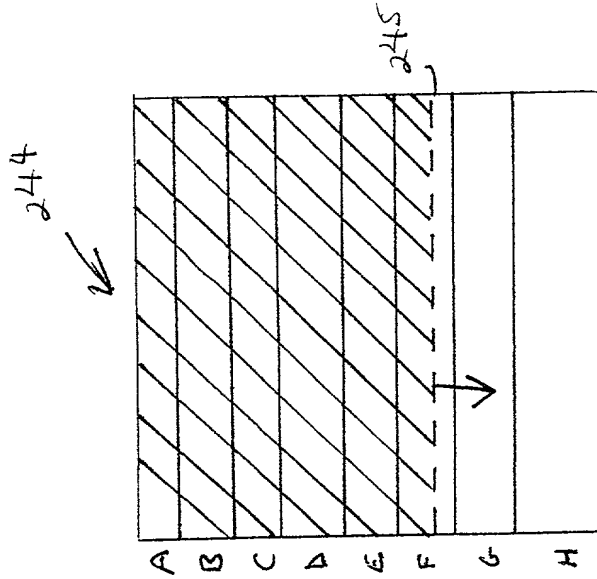


FIG. 30
30

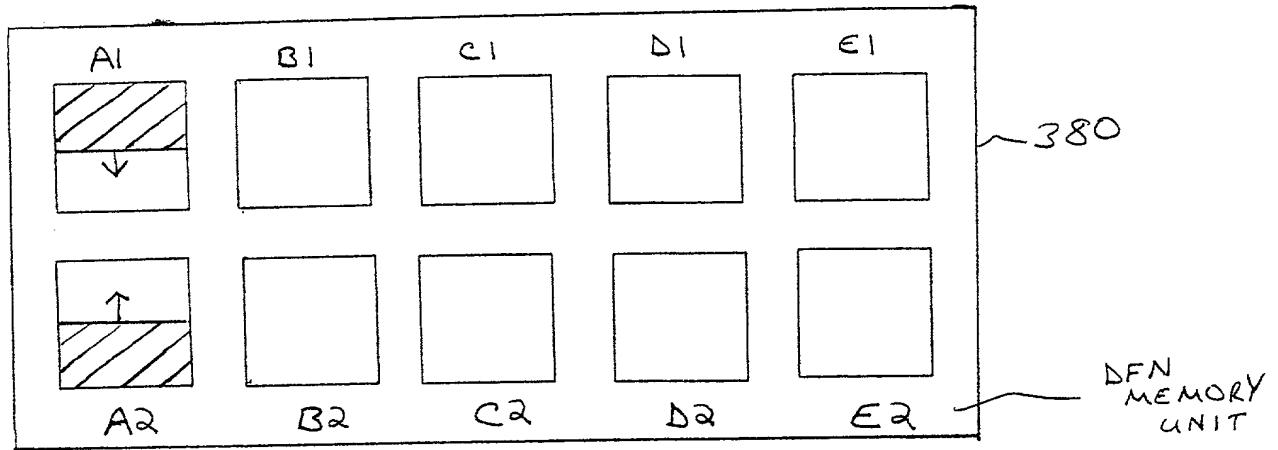


FIG. ~~31A~~ 31

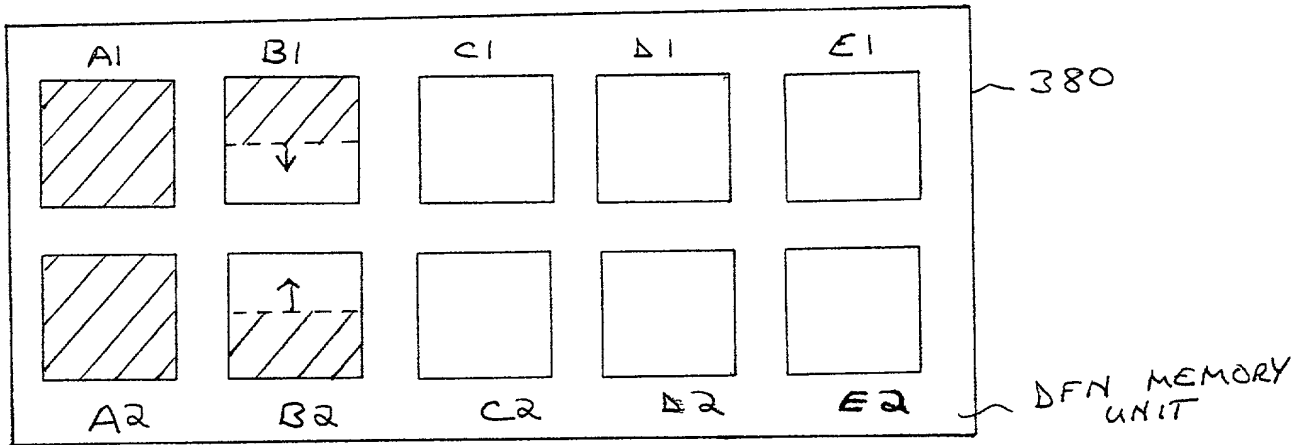


FIG. ~~32A~~ 32

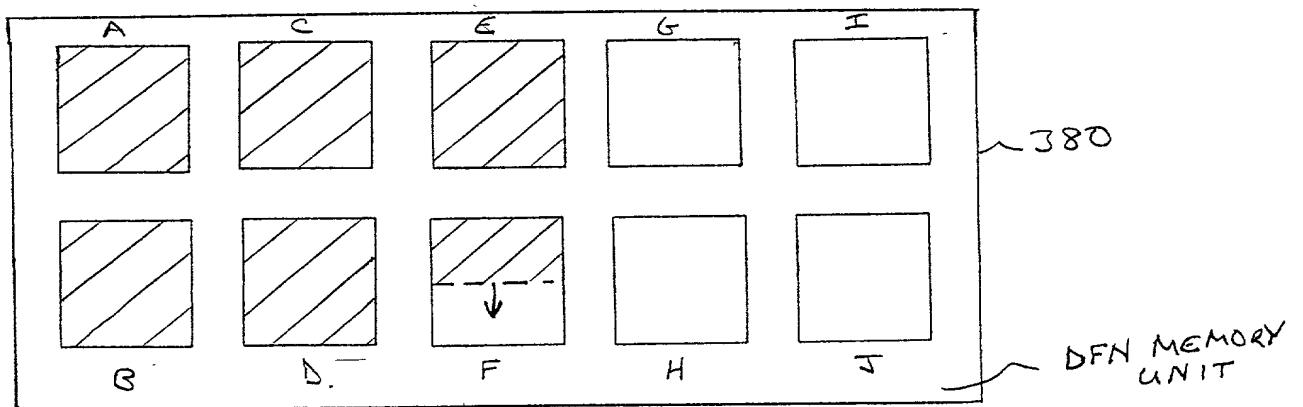


FIG. ~~33A~~ 33

A1
A2

334

FIG. ~~33A~~
34

A1
B1
C1
D1
D2
C2
B2
A2

334

FIG. ~~33B~~
35

A
B
C
D
E
F
G
H

334

FIG. ~~33C~~
36

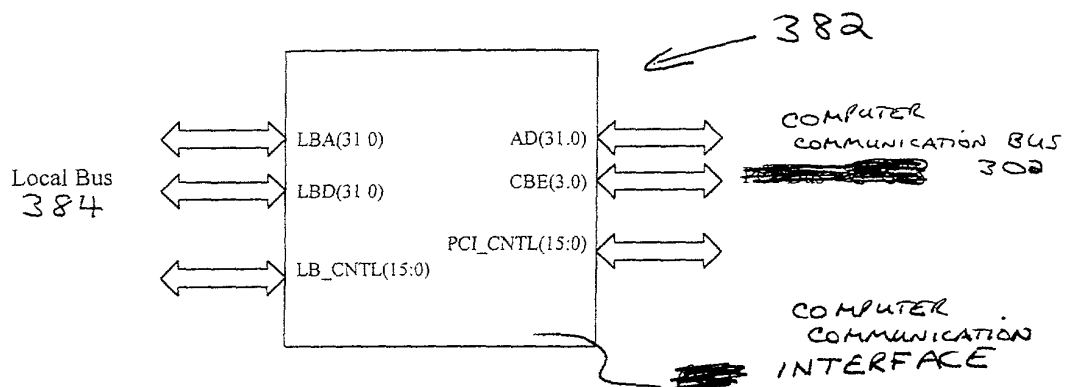


FIG. ~~37~~ 37